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**DESTRUCTIVE BEHAVIOR AMONG ADOLESCENTS:  
THE ROLE OF SOCIAL INTEGRATION  
IN THE ACADEMIC INSTITUTION**

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

in

The Department of Sociology

by

Matthew E. Wilkinson  
B.A., Rhodes College, 2000  
M.A., Louisiana State University, 2004  
December, 2008

## **DEDICATION**

For my parents, who gave me solid ground to stand on,  
showed me the path, and taught me balance in life.

And for Frank, whose journey showed me true perseverance,  
and whose life continues to bring perspective to my own.

## **ACKNOWLEDGEMENTS**

I would like to first thank Dr. Michael Grimes for all of his guidance, support, and insight over the years. His support and feedback through the final months of this project will be forever appreciated. I am greatly indebted to Dr. Susan Dumais for the countless meetings, revisions, and input that allowed me to bring this project to completion. Her oversight and advice allowed me to develop as a sociologist and I am fortunate to have had her as a mentor.

I am also grateful for the contributions of Dr. Mark Schafer and Dr. Troy Blanchard, who instilled in me the confidence to move forwards and begin the next phase of my career.

I would also like to thank Tonya Duthu, Jamila Beasley, and the countless other university support-staff who work so hard for all of us, and seldom receive the credit they deserve. Collectively, they have made my time at LSU much easier and much more enjoyable.

This journey would not have been possible without the early guidance and direction of Dr. Tom McGowan, my undergraduate advisor and mentor at Rhodes College. I am forever grateful to him for first introducing me to the discipline of sociology and facilitating my development both as a sociologist and a human being.

Lastly I would like to thank my parents for their love and support over the years and for always inspiring me to do my best and remain true to myself, and my sister, for reminding me who I am and allowing me to see myself from the outside in.

And to all of my friends, colleagues, coworkers, housemates, and teammates; thank you all for your support, patience, and understanding. Insight and inspiration often come from unexpected places, and I thank you all for your own unique contributions.

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## ABSTRACT

This study explores the relationships between the social environment of the academic institution and the self-destructive behavior of the students within it. My approach combines elements of strain and social control theories to expand the concept of social integration and its importance in influencing adolescent deviant behavior; I include theories of identity, efficacy and locus of control, and self-concept in my theoretical model. My primary focus is on the importance of social integration in anchoring the individual into the social environment, providing him/her with pro-social sources for identity, efficacy, and social support. For students, the social environment of the school serves as a stage for public performance and construction of the adolescent identity.

Regression analyses of data from the National Educational Longitudinal Study of 1988 reveal that students who participate in any extracurricular activity during their sophomore year are less likely to commit light delinquency, are less likely to get into fights at school, less likely to use marijuana and cocaine at school, and are more likely to experience feelings of empowerment and personal control during their senior year. Even after we consider differences in race, gender, SES, school characteristics and location, academic performance, student employment, student church attendance, parental involvement in school, and student involvement in the community, delinquent behavior during the senior year is greater for students who did not participate in *any* extracurricular activity during their sophomore year. Furthermore, these relationships *are even stronger* among students who also experienced feelings of powerlessness and negative self-concept during their sophomore years. Over the course of their high school career, these students stand to gain the most from participation in the school environment. Social integration in the school anchors students in a structured, ordered existence; the social support, norms, routine, and identity enhancement that accompany social integration



provide buffers against sources of strain *and* outlets through which to cope with the stressful environment of the school.

## CHAPTER ONE: INTRODUCTION

“We have come to a tipping point – and gone beyond it in many places in our country. In almost every community in America, growing numbers of kids live in a socially toxic environment.”

James Garbarino, 1999: 19

On a Monday morning in April of 2007, twenty-three year old college student Cho Seung-Hui went on a shooting rampage at Virginia Tech, killing thirty-two people before taking his own life. It was the most violent school shooting on American soil to date; it was also the first incident of its magnitude to occur on a college campus. Almost eight years earlier to the day, Columbine high school students Eric Harris and Dylan Klebolt invaded their high school, killing twelve students and a teacher, and, in the end, taking their own lives as well. In the years between Columbine and Virginia Tech, there have been some forty-one incidents of “extreme” school violence worldwide, with the overwhelming majority occurring in the United States and in high schools.<sup>1</sup> The Fall of 2006 saw four incidents in just three months, including the Amish school shooting in Pennsylvania. While the incidents have varied according to severity, motive, targets, age of the shooters, etc., it is clear that this has become s a recurring problem with no sign of attenuation. Writing in pre-Columbine times, Noguera (1995) observed that many school districts considered concern about school violence to be their highest priority for reform and intervention, even over issues surrounding academic achievement -- and this concern has only grown in the following years.

The severity of Columbine and Virginia Tech prompted a rush to address and alleviate the “epidemic” of violence in our nation’s schools. While extreme acts of school violence have remained the focus of the majority of recent attention, it is these *outer*-directed incidents of such magnitude and visibility that have brought a much deeper problem to the forefront. Sociologist Donna Gaines criticized the general response to the events at Columbine, noting, “everyone

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<sup>1</sup> [http://www2.indystar.com/library/factfiles/crime/school\\_violence/school\\_shootings.html](http://www2.indystar.com/library/factfiles/crime/school_violence/school_shootings.html) (February 2007).

wanted to look at drugs and divorce as causes of the suicides, but they overlooked what was going on at the school” (Mann, 1999: 1). A critical examination of the dynamics of the social structure of Columbine reveals that conflict existed among various social groups competing for popularity and visibility. Such conflict-ridden, “socially toxic environments” are a growing problem in our nation’s schools; the same socio-structural arrangements that facilitated the Columbine tragedy may also contribute to the increased levels of substance abuse, depression, suicide, and other disruptive/destructive behaviors that we see among America’s adolescents today.

Psychologist James Garbarino (1999: 117) argues that, while some adolescents respond to difficult situations with “severe externalizing behaviors”, other equally-troubled kids respond with self-destructive acts and inner turmoil (i.e., by internalizing these problems). Garbarino (1999) found that youth suicide rates have risen concurrently with homicide rates, so that each murder committed by an adolescent is now matched by a suicide. A government study conducted in 1999 found that one in five adolescents had seriously considered suicide, while one in ten actually attempted suicide (Ames, 2005: 198). In 2003, 16.9% of high school students admitted that they had seriously considered suicide and most said they had even devised plans for how they would kill themselves (Twenge, 2006). The suicide rate for children under the age of fourteen has doubled since 1980 (Twenge, 2006). Meanwhile, outside the adolescent world in the larger society, the number of people undergoing treatment for depression more than tripled between 1987 and 1997, and the average college student in the 1990s was more anxious than 71% of students in the 1970’s (Twenge, 2006).

The current problem, then, is clearly not limited to the outer-directed incidents of school violence seen so frequently in the headlines -- extreme acts of school violence are merely the tip of the iceberg. The foundation for such behaviors is sociologically interesting because it sets the

stage understanding not only these acts, but also less severe behaviors that often go unnoticed.

In short, there appear to be common factors responsible for the corresponding rise in adolescent suicide and homicide, as well as increases in depression and anxiety. Elliot Aronson, author of *Nobody Left to Hate: Teaching Compassion after Columbine* (2000: 64), affirms:

For millions of youngsters, middle school and high school are stressful places – and much of that stress is unnecessary. There are only a small number of students who respond to that stress by lethally lashing out at their fellow students, but the number of students who are unhappy, anxious, and depressed – to the point of contemplating suicide – is much larger than most parents realize.

This dissertation will explore the relationships between the social environment of the academic institution and the self-destructive behavior of the students within it. Drawing primarily from strain/anomie theory, social control theory, and theories of social integration and identity, I will examine the goals of the adolescent social system and the institutional means through which they are pursued. Of particular interest is the relationship between the degree of social integration within school and anti-social behavior of students. For example, do students who participate more in their school's social environment have better outcomes (i.e., lower involvement in delinquent activities, higher sense of self-efficacy and personal control, more positive self-concept), and, if so, what is the strength of these relationships? Do schools that foster greater social involvement and inclusion have lower incidents of delinquent behavior and more positive self-concept among students?

The remainder of this dissertation is organized in the following manner. Chapter 2 begins by stepping back to the larger question, and reviews existing theories of deviant behavior in the larger society. I then present and review the relevant literature for the more context-specific problem of self-destructive behavior among adolescents in schools, covering social integration, identity, self-efficacy, locus of control, and strain and anomie (including delinquent adaptations/responses to strain). Chapter 3 presents my preliminary conceptual model and hypotheses. Chapter 4 outlines the data and methods of this study. Chapter 5 presents the

empirical findings of my analysis. Chapter 6 includes a summary of the results and a discussion of their implications. Finally, Chapter 7 discusses the limitations of the present study and suggests possible directions for future research.

## **CHAPTER TWO: THEORETICAL BACKGROUND**

### **PART ONE: EXPLANATIONS OF DEVIANCE IN THE LARGER SOCIETY**

In our considerations of deviant behavior, Newman (2004) observes the tendency of the popular press to ignore larger socio-cultural factors and instead “take the lens down the pathologies of individuals”; indeed, individual blame-centered approaches are often the most immediate, straightforward by which people attempt to make sense of deviant behavior. At the opposite end of the spectrum are the more demanding/challenging explanations, ones that cause us to look at the roles played by the social environments within which we are immersed. This section will review common responses to deviant behavior.

#### **Blaming the Individual**

Ames (2005) compares the public response to the workplace shootings of the 1980’s to the initial high-profile school shootings of the late 1990’s: in each case, the tendency was to blame the outburst on some “pathology” of the perpetrator. Though many immediate reactions to violent outbursts revolve around notions of “snapping” or insanity on the part of the offending individual, research has revealed that both school and workplace shootings are generally planned well in advance (Newman, 2004; Ames, 2005). The immediate response to Columbine, for instance, was to blame the massacre on the “symptoms of the perpetrators' innate evil” rather than framing them as calculated, deliberate reactions to unbearable circumstances linked to the larger social environment (Ames, 2005: 58). Ames (2005) reasons that the tendency to blame evil or pathology is “far more comforting” than digging deeper to uncover root causes that may “come close to implicating all of us” (Newman, 2004).

Common approaches to explaining delinquent behavior focus on the individual as their unit of analysis -- criminal profiling and labeling, psychological counseling, anger management, conflict resolution, and other various forms of behavior/emotion modification fall into this category. For example, Clark (1998) argues that the best way to deal with violent behavior in schools is to remove the problem students and place them in some type of special education environment or in counseling. This approach is narrow in that it assumes that the student *him/herself is the problem*, and that his/her action is independent of any larger and, perhaps, unseen forces. Any intervention that attempts to deal with the problem out of the context within which it exists (the everyday classroom or social environment of the school) ultimately fails because the student is eventually sent back into this very environment with all of its original conflicts and pressures still fully operational. This approach also assumes that the troubled or potentially violent youth *can* be identified, so that (s)he might be removed from the regular classroom and placed in the special environment. The process of identifying (profiling) “troubled students” consists of monitoring behavior for indicators of troubled or potentially violent individuals, in theory allowing for early identification and possible intervention.<sup>2</sup> Because schools are generally under-resourced, this profiling often becomes an additional responsibility of teachers (Newman, 2004). The primary problem with profiling is that it assumes that troubled students *will* show clear/marked “warning signs” before any eruption; Newman (2004) observes that most school shooters “showed no marked change in academic performance, friendship patterns, interest in school, or school disciplinary problems before their attack” (356), and, more notably, that the “troubled students” (i.e., those routinely sent to the

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<sup>2</sup> Including, but not limited to, scattered thinking, spreading rumors, belligerence toward others, arguing increasingly with others, sabotaging equipment, seeing oneself as victimized (Byrnes, 1999: 1), withdrawal from friendships, greater risk-taking behaviors, academic difficulties, and trouble eating, sleeping, or concentrating (Newman, 2004: 295).

principal's office) "are *not* the ones who become school shooters" (103).<sup>3</sup> Ames (2005: 119)

remarks:

The inability to profile these rage murderers is important because it strongly suggests that external factors, that is, environmental factors, create the rampage murderer, rather than the internal psychological disorders of the rampage attacker.

And, while profiling/behavior monitoring appears at face value to be an effective means for predicting and preventing any eventual eruption, it does not address or alter the root cause(s), *because the importance of the larger social context is overlooked*. Adler and Adler (1995) argue that the psychology of the individual depends largely on the immediate social environment -- in order to understand the individual, we must begin to understand the larger context within which (s)he exists. The individual-level approach is limited in its scope, and, in "blaming the individual", we displace any role that the larger society and institutional organization might play in shaping the actions of social actors and situations within the system itself.

## **The Broader Picture**

The broader picture involves shifting the focus from individual-level explanations to the larger social structure/environment. While there may be clear cases in which individual factors warrant attention, it is also relevant to examine larger factors that both shape and constrain the behavior of individuals.

### **Popular Responses to School Violence**

In light of the more recent outbursts of extreme school violence, considerable attention has shifted away from individual-level explanations toward macro-level considerations. Two of the most immediate and common responses have been the regulation of violent media and legislative action for stricter gun control laws. The growing fear that violent video games,

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<sup>3</sup> A 2002 report issued by the Secret Service National Threat Assessment Center concluded that there was no clear profile of school shooters (Ames, 2005).



movies, music, and television material are desensitizing our children to violence (and possibly driving them to commit violent acts) has led to new regulations and restrictions to emerge. Television, music, and computer games are now subject to rating systems similar to movies. Violent computer games, one of the primary targets of the media approach, are now packaged with a rating and age-restrictions according to their content. Critics of the media approach argue that, while numerous adolescents are exposed to violent material in the media, only a handful react with violent behavior (Newman, 2004).

The severity and scale of recent school shootings have lead to a renewed debate about gun control. Comparative analyses reveal that countries with strict gun control laws (such as Germany) or a notable lack of gun ownership have far fewer incidents of school shootings than the United States (Newman, 2004). Backed by such empirical support, gun control has been a major focus in the prevention of extreme acts of school violence in the United States. While the installation of metal detectors and/or the adoption of transparent book bags may eliminate (or drastically reduce) the presence of weapons in schools, these measures only deter the violence *within* the schools themselves and only protect the students during school hours and within school walls. Lantiera and Patti (1996: 92) stress; “Weapons are not the only problem. No metal detector on earth can stop people from bringing fear, prejudice, and conflict to school, and no metal detector can prevent students from bringing that fear, prejudice, and conflict back to the street at 3 p.m.”. Additionally, it has been noted that the presence of guns in the community does not seem to be responsible for any “epidemic” in school shootings. Newman (2004) observes that hunting communities have always had a plethora of guns, but school shootings have only begun to occur fairly recently. This illustrates the full complexity of the problem, which will not be solved by simply checking for guns at the door. The availability of guns is clearly a defining factor in the magnitude of any eventual violent outburst and limiting access to guns will probably

reduce extreme acts of outer-directed school violence.<sup>4</sup> However, the underlying problem/motive still exists with or without weapons; gun control itself does not address the root cause(s) of school violence, but instead merely addresses a peripheral result (students carrying weapons) of a more complex issue. This raises the question; why are students arming themselves? What is the source of fear, anxiety, frustration, and anger that occasionally boils over in such horrific fashions? Both adolescent homicides *and* suicides are on the rise; we must acknowledge that this is not simply a “school violence” problem, and look deeper for the root causes.

Aronson (2000) categorizes approaches to addressing school violence under two headings; peripheral interventions and root cause interventions. Peripheral interventions may be defined as interventions that do not address the root cause(s) of school violence, but merely the results. The majority of current interventions, primarily addressing the threat of extreme school violence, are peripheral since they do not address the root cause(s) of the problem, which Aronson considers to be the systematic reproduction of low self-esteem and the subsequent “acting out” of adolescents. The most common/visible interventions have focused on school violence as a problem in and of itself, instead of framing it as an extreme response to stressful, undesirable social circumstances. This dissertation takes a sociological approach to understanding the root causes of self-destructive/delinquent behavior through an analysis of the intersection of the individual student and the social structure of school environment.

### **The Sociological Perspective**

The sociological approach to deviance/delinquent behavior looks to the larger social context within which individuals exist. As products of this environment, individuals are susceptible to larger cultural forces that shape and constrain their behavior. The problem with

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<sup>4</sup> As Newman (2004: 69) observes, “Mass murders tend not to happen – in school or anywhere else – when knives are the only weapon”.

blaming the individual is that the role of the larger social environment is neglected, and the influences of social forces and societal pressures are therefore overlooked. This section will review the general sociological approaches to examining deviant behavior; control theory, deterrence/rational choice theory, social learning/differential association theory, and strain theory.

### **Control Theory**

Social control theorists begin with the contention that all human behavior can be understood as “the self-interested pursuit of pleasure and the avoidance of pain” (Gottfredson and Hirschi, 1990: 5). All individuals are assumed to possess a “natural disposition towards deviance, because deviant behavior often provides the most expedient means of satisfying one's desires” (Brezina, 1998: 76). Control theory therefore focuses on the constraining elements of society that discourage deviant behavior, holding that the individual motivation to deviate is universal. McNeal (1995: 63) summarizes control theory: “Social control theory contends that individuals are naturally inclined to commit deviant acts and that the strength of one’s social bonds to various traditional institutions mediates this tendency; that is, those with stronger social ties are less likely to commit and sustain deviant behavior”.

Hirschi (1969) contends that our life experiences serve as social bonds that restrain us from involvement in delinquent activity. This social bond is conceptualized through four main elements; attachment, commitment, involvement, and belief.

Criticizing the individual-level approach to delinquent behavior, Hirschi (1969) “deconstructed” the notion of the psychopathic personality, noting that the psychopathic individual “is characterized *only in part* by deficient attachment to or affection for others”, while in fact all of the characteristics attributed to the psychopath “follow from, are effects of, [the] lack of attachment to others” (17). The balancing force of our personality (Freud’s superego), as

“society within us”, is functional or effective only insofar as we are attached to society.<sup>5</sup>

*Attachment*, as a component of social integration, implies that one shares or respects (at least to some extent) the norms of society.

*Commitment* addresses the costs and risks of delinquent behavior, considering whether or not they outweigh any potential gain (Hirschi, 1969). For the committed individual, the “stake in conformity” is high, as (s)he has more to lose by engaging in delinquent behavior because of resultant negative sanctions.

*Involvement* is the time and energy invested in structured social activities; Hirschi (1969: 22) maintains that the involved individual “may simply be too busy doing conventional things to find time to engage in deviant behavior”. Quite simply, involvement in a more structured social life leaves less opportunity/time for deviant behavior. Schafer’s (1969: 42) notion of “delinquency as boredom” echoes this sentiment; for the uninvolved, delinquent behavior may arise “out of sheer boredom”.

The social control perspective holds that efforts to control deviant behavior should focus on the necessity of negative sanctions or “consequences painful to the individual” (Gottfredson and Hirschi, 1990: 85). If individuals stand to lose place, status, or power, they will be less likely to engage in delinquent behavior.

### **Rational Choice Theory/ Deterrence**

Like control theory, rational choice theory looks to constraints built into the environment that deter deviant behavior. Rational choice theory holds that individuals perform a “cost-benefit analysis” before engaging in deviant behavior, and, if the costs/consequences outweigh the benefits, (s)he will choose to conform. Deterrence theories extend the notion of the “constraining elements society” to the threat of more formal sanctions (punishment). Thus, the

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<sup>5</sup> Durkheim addressed this notion, saying “we are moral beings to the extent that we are social beings” (as cited by Hirschi, 1969: 18).

perception of certain, swift, and severe sanctions (certainty, celerity, severity) will deter people from engaging in delinquent behavior (Paternoster, et al, 1983: 457).

### **Labeling Theory**

In labeling theory, the attention shifts from the individual as a deviant actor to those who have the power to label the individual *as* deviant; Becker's (1973) oft quoted maxim "it is not the act itself, but the reactions to the act, that make something deviant" summarizes this perspective.

Labeling theorists address the unintended consequence of profiling/labeling practices, noting that, in the efforts to prevent delinquent/criminal behavior via early identification, a self-fulfilling prophecy may occur; "labeling [the individual as deviant] places the actor in circumstances which make it harder for him to continue the normal routines of everyday life and this provokes him to 'abnormal' actions" (Becker, 1973: 179).<sup>6</sup> By virtue of being labeled delinquent, one is treated *as* delinquent, and may incorporate this role into his/her identity, thus prompting further delinquent activity (Becker, 1973; Lemert, 1972). Furthermore, the actor may be forced into association with a "deviant community," thereby increasing the exposure to "definitions favorable to delinquency."

### **Social Learning/Differential Association Theory**

Differential association (social learning) theory departs from control, rational choice, and deterrence theories on the grounds that the motivation to deviate is not assumed to be universal, but is instead understood as something learned from the social environment. This is an important ideological shift, as the elements of the social environment are viewed as motivators to deviance as opposed to as a reactor in response to deviant behavior. Simply put, differential association

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<sup>6</sup> Becker (1973) provides the example of the blacklisting effects of a prison record, which can make it less likely for the former inmate to find a conventional job, leaving him to perhaps seek out occupation characterized by illegal activity.

theorists understand delinquent behavior as the result of exposure to deviant influences (Schafer, 1969). Through memberships in various social groups, the individual is exposed to competing definitions of behavior; an imbalance, or “excess of definitions,” results, steering the individual either towards conformity or deviance.

### **Strain Theory**

Control, rational choice, and deterrence theorists see the role of society (i.e. social institutions) as one of “impulse management” and the “social processing of tensions” (Merton, 1938: 672). These theories fail to address the issue of motivation for deviance, and instead look to constraints built into the social environment that may deter delinquent behavior. Merton (1938) challenged this notion, asserting that some aspects of social structure “*exert a definite pressure* upon certain persons in the society to engage in nonconformist rather than conformist conduct”<sup>7</sup> (Merton, 1938: 672). Agnew’s (1992) general strain theory identifies three major sources of strain: 1) the failure to achieve positively-valued goals, 2) the loss of positively-valued stimuli, and 3) the introduction of negative stimuli. Strain theory links the behavior of the delinquent individual with the larger culture/social structure in which (s)he exists; the motivation to deviant behavior is not taken as given, but is instead seen as a response to stimuli from the external environment.

Control, rational choice, deterrence, social learning, labeling, and strain theories are united by a common element; the degree to which the individual is attached/immersed in society itself. One’s attachments, commitments, involvements, his/her susceptibility to definitions favorable to delinquency or conformity, the extent to which delinquent labels carry meaning and affect identity, and the degree of “definite pressure” exerted upon the individual by society are all essentially a function of social integration.

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<sup>7</sup> Emphasis mine

## **Society and the Individual: Anomie and Social Integration**

The study of the relationship between individual behavior and larger social forces is the very foundation of sociology, and has guided the discipline since its inception in the mid 1800's. Hughes and Gove (1981: 49) note that "virtually all theorists responsible for the establishment of sociology, somewhere in their writings, affirmed the vital nature of close social bonds, contrasting them to alienation, anonymity, rationality, and social isolation". The relationship between the individual and society is conceptualized as *social integration*.

Hughes and Gove (1981: 54) outline social integration as "an attribute of social situations arising from the density of social interaction" and as "characterized by strong common sentiments and by intensification and fortification of the meaning of life, of social regulation, and of constraint". A lack of social integration and the consequential absence of a structured social life has been characterized under the label "anomie," which means, more generally, a state of normlessness and isolation, with correspondingly weakened ties to the larger society.<sup>8</sup> The prevalence and pervasiveness of anomie theory in the sociological literature is undeniable. Mizruchi (1960) cites the growing interest in Durkheim's concept of anomie and the increasing time and space afforded to it in sociological journals. Paxton (1999: 88) observes that concerns about social integration and decline in community have been a recurring theme in classical and contemporary sociology, noting that the birth of sociology itself "occurred in concerns about potential declines in community due to industrialization and the advent of modernity".

Srole (1956: 716) identified the continuing trend among social scientists "toward convergence of interest in the phenomena of social integration", and credits Emile Durkheim with "powerfully and single-handedly" laying the groundwork for this trend. Portes (1998: 2)

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<sup>8</sup> Though the concept of anomie is most often associated with sociologist Emile Durkheim, the term "anomie" itself was coined by Jean-Marie Guyau in 1885. Guyau adopted the term from the Greek dichotomy "eunomia" and "anomia," the former denoting a "well ordered condition in a society or state, the latter its opposite" (Srole, 1956: 710).

recognizes Durkheim's original "emphasis on group life as an antidote to anomie and self-destruction" as "an insight present since the very beginnings of the discipline". Robert Putnam's *Bowling Alone: The Collapse and Revival of the American Community* (2001) brought social integration and anomie into the modern era, conceptualizing the benefits of social integration under the label "social capital."<sup>9</sup> The multidisciplinary convergence towards concern with community and the emergent "network society" is evidence of the ultimate importance of the benefits of social integration (Sampson et al., 1999; Farr, 2004; Smith and Kulynych, 2002).

This literature has established social integration as an important link in the analysis of individual delinquent behavior and the larger society; this involves stepping outside the bounds of individual-level analysis and blame-centered approaches and looking instead to the larger social structure for explanations of delinquency. Newman (2004: 126) acknowledges that these sorts of explanations are uncomfortable for many people; "they may not be the ones we want to hear, for they come close to implicating all of us". Yet, it is imperative that we tolerate this discomfort, and turn a critical eye to the larger culture in order to gain a greater understanding of the social roots of delinquent behavior. In particular, this study focuses on the school environment and the social integration of students within this environment.

## **PART TWO: DEVIANCE AND DESTRUCTIVE BEHAVIOR IN SCHOOLS**

The focus of the present study is on how delinquent behavior in schools may be a function of social integration within the school environment. It is important to note that any critical analysis of the school system is often easily transferable/applicable as a criticism of the larger society; a considerable amount of the literature on the relationship between schools and society sees schools as perpetuating pre-existing social inequalities. Bowles and Gintis's correspondence theory (1976) proposes that schools function as socializing agents in preparing

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<sup>9</sup> Portes (1998: 2) calls social capital "one of the most popular exports from sociology into everyday language".



students for their placement into the larger status-hierarchy; those with larger amounts of human, social, and cultural capital will be sorted, prepared, and credentialed for leadership positions and professions, while those with lesser amounts will be prepared for subservient, powerless (working class) positions (Bowles and Gintis, 1976; Eckert, 1989). Collins's *Functional and Conflict Theories of Educational Stratification* (1971) maintains that the main activity of schools is to teach the particular status cultures of the larger society; the social stratification and inequality apparent in the larger society, then, is reflected in the academic institutions. Schools therefore do not *introduce* inequality, but instead validate and reinforce pre-existing arrangements of the larger society. Eckert (1989: 5) observes that the emergence of student social groups (most notably, the dichotomous "Jocks" and "Burnouts") are the "adolescent embodiment of the middle and working class"; "just as adult class differences involve differences in orientation to society's institutions, [these] categories reflect opposing relations to the school, the single institution that dominates the life of the adolescent age group".

The sociological importance of schools lies in their role as a location where adolescents step out of the realm of familial influence and into the larger society, where they continue in their development/construction of identity within the school context (Eckert, 1989; Coleman, 1961). Eckert (1989: vii) observes, "It is the high school that brings together adolescents from a variety of social backgrounds in such a way as to force them to interact with, and react to, each other". Though students bring with them certain attitudes, opinions, and beliefs instilled in them by their home/familial environment, it is within the academic arena that these preconceived notions may be reinforced, challenged, or dissolved. While we cannot seek to isolate schools from the larger society, as they are embedded in the larger social contexts of neighborhoods, networks of families, communities, and a rigidly defined social class system (Newman, 2004: 284), we can

recognize the important influence of the academic institution as a socializing agent, and the role it may play in the prevention/reduction of self-destructive acts of behavior among adolescents.

With this in mind, let us turn our attention to the school society and apply our sociological explanations of deviance and delinquent behavior to the school environment.

### **Applying Sociological Approaches to Deviance in the Adolescent Society**

I have reviewed the general approaches to deviant and delinquent behavior as they exist in the larger society. The contextual focus of this dissertation is the adolescent society, more specifically, the culture and society created in and around the academic institution. The school environment, as a reflection of the larger society, is an appropriate context for the application of general approaches to deviant and delinquent behavior. This section will briefly review sociological approaches to deviant behavior in the adolescent society and discuss how each approach would attempt to constrain deviant adolescent behavior.

Control theorists seek to increase students' attachment, commitment, and involvement to/with the school in order to increase their "stake in conformity". One common approach to creating/strengthening student bonds to the school is having counselors encourage first-year students to join school-sponsored groups; the increased involvement in school activities theoretically creates more attachment, commitment, and involvement, while also providing students with avenues for participation and self-expression. Hirschi's (1969) emphasis on *attachment* translates to caring about what others think, as well as respect for authority and for the school as an institution. Sprott, et al (2000) found that "low attachment to school (or 'weak school bonds') increases the likelihood that children will engage in delinquency", while, "high attachment to school ('strong school bonds') decreases the likelihood that children will engage in delinquency" (4). The involvement aspect of control theory reflects the age-old maxim, "idle hands are the devil's workshop"; if students are involved in prosocial activities, there will be

little time and energy left over for delinquent pursuits. Recently, Routine Activities Theory (RAT) has addressed this notion, emphasizing the necessity of a suitable target and lack of a capable guardian (monitoring system) for deviant behavior to occur (Cohen and Felson, 1979).

The popularity of deterrence theories in schools can be found in the growing adoption of “zero-tolerance” policies. In response to supposed rises in extreme violence in schools, administrators focus on strengthening sanctions (and making them more visible and *certain*) to deter delinquent behavior. Many of these policies promote mandatory suspension penalties for any threat of violent behavior, regardless of the circumstances or credibility of the threats, leaving administrators with little discretion to separate “serious offenders from casual jokers” (Newman, 2004: 285). Newman (2004) asserts that the “Big Brother” aspects of zero-tolerance policies are too extreme; if teachers and administrators are bound by these policies, students will be less likely to trust them, since they are unable to exercise any judgment or discretion.

Lemert (1972) notes that a major problem with punishment and deterrence is the potential inconsistent distribution of punishment, which may create a sense of injustice and unfairness, and thus possibly “divert occasional youthful offenders into habitual crime.” This general inconsistency occurs within three types:

1. inconsistency between stigma or punishments (sanctions) and the deviant acts towards which they are directed
2. inconsistent applications of sanctions to the same person at *different* times and places
3. inconsistent penalties or stigmas applied to persons in the same *jurisdiction*.

Lemert (1972: 67) notes that any one of these inconsistencies can create (or strengthen) a loss of faith in the system and the aforementioned sense of injustice, thus “reinforcing a subcultural ideology of delinquency”. This was clearly the case at Columbine High School, as “dozens of interviews and a review court records suggest that Harris’s and Klebold’s rage began with the injustices of the jocks” (Adams and Russakoff, 1999).

Labeling theorists have addressed the ramifications of zero tolerance policies and the increased severity, frequency, and certainty of punishment and negative sanctions. Lemert (1972) proposes that the very act of being labeled delinquent may also incite anger and resentment, creating a sense of injustice and unfairness, possibly diverting “occasional youthful offenders into habitual crime” (secondary deviance), or creating additional hostility toward the student’s authority figures (teachers, administrators), his/her “non-troubled” peers, and/or the institution itself.<sup>10</sup>

The notion that labeling may have adverse effects on actors is profound, and overlooked; these effects provide immediate insight into policy application. The system of student detention is an example; if a student misbehaves in what can be classified as “primary” deviance, (s)he may be assigned to some form of in-school detention. There are numerous immediate effects from such labeling and reassignment of expectations: The first is that the individual may, by virtue of the deviant subculture that accompanies detention, come to associate with deviant youths; this additional exposure to definitions favorable to delinquency would not exist were it not for the authority figure’s delegation. Secondly, the adolescent may also *internalize* the notion of a delinquent self, and incorporate this into his/her self-concept. Finally, through the stigmatization associated with attending detention, the individual may find him/herself ostracized from the larger society (here, the “normal” high school culture), thus making it harder for him/her to continue to function as a normal high school student.

Differential association approaches involve targeting “deviant subcultures” and students, while addressing “definitions favorable to delinquency”. One possible angle is simply labeling/profiling these groups (“keep an eye on the troublemakers”). Another is the attempt to

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<sup>10</sup> Harris and Klebold (Columbine) were labeled as “troubled,” and attended counseling sessions and classes in anger management; this clearly had no significant effect, as the two planned their crime while they were attending these classes (Von Drehle, 1999: 5).

provide these groups with more pro-social means of involvement in the school (control theory's attachment, commitment, involvement). The social hierarchy of adolescent society deserves considerable attention and analysis. The development of social groups is contingent on their relationship to the school as a social institution; Eckert (1989) outlines this process; the "Jocks", as social categories, are defined by their more or less symbiotic, supportive relationship with the school, while the "Burnouts" are defined by their oppositional stance (and definitions "favorable to delinquency") towards the school.

Until recently, there has not been much attention to strain, or, the "stress of high school" as a contributing factor to delinquency and negative self-concept. Many efforts, as outlined above, have focused on 1) increasing student attachment to the school environment or 2) increasing/strengthening negative sanctions for delinquent behavior, but few address the *stressful culture of the school itself*. Deterrence and punitive approaches to deviant behavior (usually include some form of labeling and/or profiling) are counterproductive, as they do not address the "underlying dynamics of peer relations", and create a greater distance between students and school staff through the erosion of trust (Newman, 2004: 285). The labeling/profiling aspect of differential association approaches fail in this way as well, but addressing deviant subcultures within the school itself seems to show promise. More specifically, a closer examination is needed of the formation of these subcultures, the processes by and the degree to which they become oppositional to the larger school culture, and the consequences that may result from membership. The relationship between social groups within the school and the stressful culture of school deserves close attention; what would result from the removal/weakening of stressful stimuli/strain in the school environment?

My approach in this dissertation is to combine elements of strain and social control theories to expand the concept of social integration and its importance in adolescent deviant

behavior. I will include theories of identity, efficacy and locus of control, and self-concept in my analysis. Next, I return to the concept of social integration as it applies to adolescents.

## **Social Integration in the Adolescent Society**

Haynie (2002: 103) observes that adolescents social networks are of particular importance in that they provide social resources that “fulfill adolescents’ needs for social acceptance, personal identity, and sense of place in the adolescent peer hierarchy”. Cohen (1985: 311) contends that social integration “helps one to avoid negative experiences” by providing actors with “regular positive experiences and a set of stable, socially-rewarded roles in the community”. This buffering effect is accomplished through the presence of sources for “positive affect, a sense of predictability and stability in one’s life situation, and recognition of self-worth” (Cohen, 1985: 311). The primary benefits or “social resources” associated with social integration are *social control* (stake in conformity, norms and effective sanctions) *identity formation/affirmation* (self-concept, visibility), *self-efficacy*, *perceptions of control*, and *social support*.

### **Social Control**

Degree of social integration is essentially a matter of attachment, commitment, and involvement; the more attached, committed, and involved the individual is to/in the social structure, the less likely they are to deviate from social norms, since they have a “higher stake in conformity”; for the unattached, uncommitted, and uninvolved, a “nothing to lose” attitude may develop (i.e., a lower stake in conformity), and delinquent behavior may ensue. While such behavior may be negatively sanctioned through temporary or permanent ostracization from the group, this threat is only effective insofar as the individual is attached, committed, and involved to/with the group (and if the group itself is not deviant in nature); if one is already an outsider, the threat of negative sanctions is empty/insignificant. For the outsider, the sanction of

ostracization is already a reality; with the bond to the social structure non-existent to begin with (and the stake in conformity consequently low), the actor has nothing to lose by engaging in deviant behavior. Hirschi (1969: 17) contends, "If a person does not care about the wishes and expectations of other people, then he is to that extent not bound by the norms. *He is free to deviate*".

Harrington and Fine (2000: 315) contend, "forces of social control do not operate most effectively on dyads or in large, diverse populations; rather, they exert power when mediated through groups". For adolescents, then, social control is produced and maintained through membership in the social groups found in the school or neighborhood.

### **Self-Concept, the Looking-Glass Self, and Visibility**

The notion of visibility emerges as an important factor in understanding delinquent behavior of adolescents. According to Cooley's concept of "the looking-glass self," our self-concept is derived through our perception of how others see us. This occurs across three stages: 1) we imagine how others perceive us; 2) we imagine what their judgment regarding this perception may be; 3) we develop some self-feeling as a result of our assumptions of the others' judgments. According to this model, our self-worth is based on the reflected opinions and appraisals of significant others toward us. Our development of self-concept relies on the availability of "social mirrors", which provide us with information about ourselves; we internalize the way we think others perceive us, and incorporate this opinion into our self-concept. In short, individuals *see themselves as others see them*. If one is an active, participating self, then one is seen (visible), and has purpose and meaning in the eyes of significant others (family, peers); if one is not engaging in meaningful activity, then one may feel (and *is*, to some degree) invisible to others, and may internalize these feelings and incorporate them into their self-concept. Newman (2004: 132) characterizes early adolescence as a key

phase in which “youths have not yet developed a firmly established sense of personal identity and hence tend to see themselves through the lenses of their peers”. Because one’s sense of self is largely dependent on our visible expression of meaning through activity in the eyes of those whose opinions we value the most, social involvements serve as reference groups or “‘mirrors’ that reflect images of the self” (Gecas and Schwalbe, 77: 1983). An absence of meaningful group membership therefore results in an inner turmoil that may be externalized negatively.<sup>11</sup>

### **Social Identity and the Identity Accumulation Hypothesis**

The importance of identity construction in the adolescent social world has been well documented (Coleman 1961; Erikson 1968; Cusick 1973; Eckert 1989; Epstein 1998; Hersch 1999; Kinney, 1993; Gaines, 1991). Students’ social-identities provide them with roles, sets of “behavioral expectations (or ‘scripts’) which are attached to positions in the social structure” (Thoits, 1991: 104). These scripts “provide the individual with a sense of who he or she is (in the existential sense) and how he or she ought to behave” (Thoits, 1991: 104). These guidelines for behavior are crucial to mental health. Thoits (1983: 175) observes:

If one does not know who one is, in a social sense, then one simply does not know how to behave. Not only may a profound sense of anxiety or depression be experienced, but severely disorganized behavior may result.

According to Thoits’ Identity Accumulation Hypothesis (1983) the presence of one or more role-identities should reduce the incidents of anxiety, depression, and disordered behavior. Each additional identity possessed by an actor should further strengthen his/her “existential security”; “the greater the number of identities held, the stronger one’s sense of meaningful, guided existence” (Thoits, 1983: 175). Social-identities do not exist in a vacuum, as they are meaningful only insofar as they achieve recognition and visibility within the larger social

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<sup>11</sup> Both Harris and Klebold wrote in their journals about feeling left out; While Harris was intent on directing his pain outward, seeking revenge on those he saw responsible (extra-punitive), Klebold was more concerned with ending his own misery (inner-directed/inner-punitive).



environment; to this end, the possession of one or more social-identities implies a greater degree of social integration.

Kinney (1993: 22) identifies the adolescent social system as the “primary social arena in which adolescents develop a healthy sense of identity”. Through participation in school-centered activities, adolescents work to construct their identity through competition for valued resources such as visibility, recognition, and sense of efficacy (Corsaro and Eder, 1990). Kinney (1993) suggests that adolescents are especially aware of these public performances and the way these performances are perceived by others. This “exaggerated egocentrism” suggests that the mind of the adolescent is continually concerned with performance for an “imaginary audience” (Kinney, 1993: 30); to this end, adolescents require avenues for meaningful participation that allow for positive visibility and appraisal. School-sponsored activities emerge as a crucial outlet filling this role.

With the increasing popularity and importance of the after-school period, students are spending, on average, more and more time at school than ever before; much socialization now occurs outside of the classroom in the extracurricular and informal activities of the school, allowing the after-school period to emerge as one of the most powerful agents of adolescent socialization (Adler, 1999; Eder and Parker, 1987; Agnew and Peterson, 1989; Coleman, 1961). It is through the various activities offered by the school that students can express themselves and their various interests and obtain group affiliation and status. These activities are the primary means by which social groups may find means of representation and self-expression; “adolescents are most likely to gain positive visibility through participation in extracurricular activities” (Corsaro and Eder, 1990: 208).<sup>12</sup>

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<sup>12</sup> Kinney (1993: 30) support this point: “These activities provided alternative domains to achieving school-wide popularity in which students could feel adequate and successful. Specifically, many students who

## **Self-Efficacy and Locus of Control**

Gecas and Schwalbe (1983) suggest that the “looking-glass” component of self-concept is only one facet of identity formation. They suggest of equal importance is the active and creative nature of the self (Gecas and Schwalbe, 1983: 78). Mead’s (1934) distinction between the “I” and the “Me” highlights this importance (the *I* being the active subject that acts on the environment, the *Me* being the passive object that is acted upon by the environment). The concept of self-efficacy is rooted in issues of human agency, mastery/competence, and sense of control/effectiveness (Gecas, 1989).

Gecas (1989) notes that theories of self-efficacy can be divided into two branches, those that emphasize the motivation to produce effects on the environment, and those that emphasize expectations and perceptions of control (Gecas, 1989). For this reason, locus of control and self-efficacy exhibit considerable conceptual overlap, occupying much of the same theoretical domain (Smith, 1989). Judge, et al, (2002: 693) note that locus of control and self-efficacy (as well as a host of other psychological variables related to the self) “intercorrelate so highly that they must be considered measures of the same construct”.

Both self-efficacy and locus of control have been conceptualized as the degree to which one perceives him/herself as either *having control over* or *being controlled by* his/her social environment. The difference between the two concepts is that efficacy is more centered on beliefs in one’s own capabilities to affect future outcomes, whereas locus of control is grounded in notions of power/control over one’s own situation in life (regardless of one’s own capabilities). Mirowsky and Ross (1983: 228-9) outline locus of control:

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participated in these activities said that they had “more confidence” in themselves and felt less “self-conscious” about how the popular people viewed them.”

Belief in an external locus of control is a generalized expectation that outcomes of situations are determined by forces external to one's self, such as powerful others, luck, fate, or chance. Belief in an internalized locus of control . . . is a generalized expectation that outcomes are contingent on one's own behavior. In the former the individual believes that he or she is powerless and at the mercy of the environment, while in the latter the individual believes that he or she can master, control, or effectively alter the environment.

Seeman (1972, 1983) has equated external locus of control with powerlessness, alienation, and anomie; all of which are crucial factors in the examination of delinquent behavior and negative self-concept. The importance of self-efficacy and locus of control cannot be understated; efficacy has been found to be a significant factor in overcoming various phobias and anxieties, alcohol and drug abuse, eating disorders, overcoming smoking addiction, depression and mental disorders, and recovery from illness (Gecas, 1989: 298)<sup>13</sup>. Most importantly, and of particular significance to the adolescent, a sense of empowerment provides a “mediating or buffering role” between experience of strain and the development of depression (Gecas, 1989: 299).

### **Social Support**

The benefits of social integration extend beyond the provisions of structure, social identity, and scripts for behavior. Individuals draw on their larger social networks for assistance and support in stressful situations (Latkin and Curry, 2003) (Jackson, 1992). Cohen (1985) presented four subcategories of social support (three of which are relevant to the present study). *Esteem support* is feedback that a person is valued and accepted “for their own worth”.<sup>14</sup> *Informational support* is help in “defining, understanding, and coping with problematic events” (313). *Social companionship* is simply “spending time with others in leisure and recreational activities” (313). Lin (2001: 233) observed that social integration (via network membership) helps individuals “deal with daily life [and] reduce uncertainties” by providing them with

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<sup>13</sup> See Gecas (1989: 298) for a more complete review of studies and these findings.

<sup>14</sup> Cohen (1985) notes that *esteem support* is often referred to as “emotional” or “self esteem” support.

“emotional aid, material aid, information, companionship, and a sense of belonging”. In the adolescent social arena, peers are the primary source of social support, and therefore play the most crucial role in integrating the student into the larger social system.

With the multidimensional benefits of social integration established, it is necessary to take a brief look at the opposite end of the spectrum; social isolation.

### **Consequences of Social Isolation**

For the integrated, life's blows should be softened, or buffered, by other involvements; for the isolated individual, life's blows should be magnified in impact due to the lack of other meaningful involvements.

Thoits, 1983: 178

Following Thoits (1983, 1991), the well integrated may be characterized by the possession of multiple role-identities that ground them in a meaningful, structured existence, and thus shield them from negative stimuli (or *buffer* the effects); social isolation, then, is conceptualized as the possession of few social identities (Thoits, 1983).

Social isolation and the anomic condition have been associated with the development of various types of mental illness.<sup>15</sup> Kohn and Clausen (1955) examined the relationship between anomie and both schizophrenia and manic depression; they concluded that “any form of isolation that cuts the person off from intimate social relations for an extended period of time may possibly lead to [these forms of] mental illness” (265). While this relationship may easily be reverse causal (those suffering from mental illness may withdraw from social relations), Jaco (1954) found a positive correlation between communities’ rates of social participation and occurrence of schizophrenia and manic depression within that community.<sup>16</sup> Participation in one’s social environment may have a buffering effect; as Seeman (1983: 178) concluded, “those

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<sup>15</sup> Paranoia, for example, is an extreme form of social alienation, resulting from social isolation (Mirowsky and Ross, 1983). Paranoia is a completely externalization of control, to the point of fear, worry, and intense anxiety.

<sup>16</sup> Putnam (1995) also observed that people with socially isolated individuals “*face greater risks of illness and mortality, even controlling for socioeconomic status and for physiological factors*” (Putnam, 1995: 19).

who are not integrated into supportive social networks suffer a wide range of negative consequences, since the effects of stressful circumstances can be moderated or eliminated for those who are not isolated”.

### **Role of Peers in the School Environment**

In our consideration of the mental health of adolescents as the “state of balance” established between the individual and the social environment, the role of peers and the school environment has never been more significant. With the increase of dual-earner families over the past generation, the amount of so-called “quality time” spent between parents and their children has decreased, allowing outside influences to emerge as more powerful agents of socialization (Adler, 1998). Two key influences are social groups as encountered within and around the school and the participation in extra-curricular activities in what is known as the “after-school period.” John Coleman (1980) emphasizes the importance of this transition, recognizing the “gradual severance of the early emotional ties with the parents” as an “integral feature of adolescence”. Corsaro and Eder (1990) cite a growing autonomy from adults in adolescence in which the peer group becomes an important source of social reinforcement. Ambert’s (1994) in-depth analysis of over 1,400 student autobiographies found that “peers” were recalled as the main source of happiness/unhappiness, overshadowing the perceived influence of parental interaction; the students also “used more page space and the liveliest vocabulary concerning peer-related unhappy experiences” (122).

The peer group as encountered within the social system of the school now challenges the family unit as the leading agent of socialization of America’s adolescents; some theorists now argue that “peers may be as important as adults for children’s acquisition of social skills and knowledge” (Corsaro and Eder, 1990: 198). The adolescent peer group has emerged as a dominant reference group for students, becoming one of the most influential factors in the lives

of adolescents of today's world (Adler and Adler, 1995). Schools generate an internal culture that is dependent on the formation of student groups, which are largely defined on the basis of shared student interests, frequent contact, and school sanctioned activities (McNeal, 1995). Student identities are contingent on these group memberships and group visibility, as well as how their group is viewed and labeled (positioned, situated) within the larger school society. An absence of group membership equates to a level of invisibility and lack of reinforced/recognized student identity. Lippitt and Gold (1959: 40) observe that the student's position in this social structure is the "dominant aspect of [the] school environment and of [his/her] total life situation, [becoming] a very important determinant of [his/her] personal mental health situation".

### **Strain and Anomie in the Adolescent Society**

Ultimately, it is on the inner lives of boys that environmental influences take their toll, setting in motion the chain of events that result in the horror of Jonesboro, Springfield, or Paducah.  
Garbarino, 1999: 19

The importance of the social environment as a critical factor in determining one's "mental health situation" is a base tenet of strain theory. Merton's classic *Social Structure and Anomie* (1938) presented the first formulation of strain theory, highlighting the internal struggle to respond to external, societal pressures. Merton's theory holds that societies are structured with culturally defined goals, purposes, and interests which individuals may pursue according to prescribed institutional norms and means. The individual internalizes societal goals and the acceptable means by which they may be achieved, and then assesses the immediate opportunity structure; the individual may then experience strain if there is blockage or absence of avenues to the desired goals. Having experienced strain, (s)he selects one of five modes of adaptation in response to the anomic condition (Table 2.1).

The most common avenue is *conformity*, wherein the individual conforms to both cultural goals and institutional means. In this model, the individual pursues a culturally promoted goal

through acceptable and legitimate institutional means. Cohen (1959) notes that although most individuals may “carry a chronic load of frustration”, they continue to conform because it is the only acceptable avenue according to their reference groups. The very stability of society is contingent on the dominance of this adaptation. Students who pursue cultural goals within the school (positive visibility, popularity) through conventional means (varsity sports, extracurricular activities, maintaining/putting on a socially acceptable physical appearance) fall into this category, and make up the bulk of the student society.

**Table 2.1: Merton’s Adaptations to Strain**

		<b>Cultural Goals</b>	<b>Institutionalized Means</b>
<b>I.</b>	<b>Conformity</b>	+	+
<b>II.</b>	<b>Innovation</b>	+	-
<b>III.</b>	<b>Ritualism</b>	-	+
<b>IV.</b>	<b>Retreatism</b>	-	-
<b>V.</b>	<b>Rebellion</b>	-/+	-/+

The second mode of adaptation, *innovation*, occurs where the individual continues to accept cultural goals, but takes alternate avenues to achieve them. This route does not, by definition, have to be delinquent, but may easily take this form. Students who reject (or experience blockage from) the accepted means to achieve visibility (for example, athletics/jock culture), may instead associate with fringe groups for visibility (Goths,<sup>17</sup> skaters, etc). Figueira-McDonough (1993) argues that “innovative students” will be more likely to engage in property

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<sup>17</sup> Upon rejection from the popular crowd, Michael Carneal (Paducah, KY school shooter) sought out the attention and approval of “the one oppositional peer group available: the Goths” (Newman, 2004: 29).

offenses in order to achieve the goal of visible display of social status. Newman (2004: 53) observes that violent youth “actually seem to be trying to accomplish goals where conventional means to achieve them are out of reach”; this may be an attempt to elevate one’s status in the school culture, state a claim to/of identity, or display power over others. Likewise, Morrison et al (1998: 2) connected the 40’s fad of “*Kilroy was here*” graffiti to present day means of “acting out”:

The individual, not finding meaning in the forms of society is forced to create his/her *own*. [and (s)he will], consciously or subconsciously, feel the need to make him/herself personally visible in a world in which anomie is becoming the norm for many.

The original Kilroy fad served as an innovative outlet for self-expression (or *self-affirming activity*<sup>18</sup>) for those who may have felt invisible; to this extent, deviant activity can itself be “self-preserving.”<sup>19</sup>

*Ritualism*, the third mode of adaptation, occurs when the individual has rejected the promoted cultural goals but continues to follow the institutional means and norms of behavior. In this case, the means becomes an end in itself. Merton suggests that where original purposes and goals are forgotten but a strict adherence to “institutionally prescribed conduct” remains, a “tradition bound, sacred society characterized by neophobia” emerges (Merton, 1938: 673). Students who feel emotionally empty but nevertheless continue to “go through the motions” fall into this category. With the goals displaced (or rejected), the only meaning to be found is in the structure of the institution; the student floats on, as an automaton.

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<sup>18</sup> Activity that evidences one’s agency as a social being

<sup>19</sup> Maris (1971) examines this notion of deviance as therapy through delinquent coping responses of the “self-destructive female,” noting that “the development of narcissistic personalities, reactive depressions, sexual deviations, marital problems, drug abuse, and suicide attempts may act as powerful ego defenses or coping mechanisms for women of certain ages. Paradoxically, female self-destructive behavior may actually be self-preservative in that it can function as an alternative to completed suicide (Maris, 1971: 113-14).



The fourth mode of adaptation, *retreatism*, consists of complete rejection of both cultural goals and institutional means. Individuals falling into this category are maladjusted and remain true outsiders to the society from which they are alienated. Their retreat is a mechanism of escape to avoid further conflict and anxiety. Students may attempt to compensate for the negative emotions by engaging in inner-directed self-destructive behavior (such as drug use), or by taking a more literal escape-avoidance strategy of skipping school or dropping out altogether (Figueira-McDonough, 1993).

The fifth and final mode, *rebellion* involves the *rejection* and *replacement* of both cultural goals and normative means. This mode of adaptation may be a transitional phase in which the existing traditional social structure is challenged, altered, or overthrown. *Rebellious* students should rank higher in all forms of delinquency; for this group, delinquency becomes a way of life (Figueira-McDonough, 1993: 265). School shooters, taking aim both the goals of school culture and the institution itself (Newman, 2004), would be classified as *rebellious/retaliatory*.

A major aspect of school culture is the adolescents' "attempts to gain control over their lives" as they compete for visibility (Kinney, 1993: 36); indeed, a *primary goal* of adolescent society is staking a claim to identity in this social environment. When students experience blockage in the pursuit of visibility and recognition they are deprived of an essential identity, which may result in "feelings of hopelessness and thus of depression" (Thoits, 1991: 106). Stets and Tsushima (2001) trace the roots of anger to this location, where "the goal of verifying one's identity is interrupted" (284). It is at this point that the internal pressure for corrective action builds, and the individual, *responding to the social pressures of the external environment*, may be moved to act.

## **Social Structure and the Individual: Socio-Structural Psychology**

The ultimate goal of this dissertation is to explore how destructive behavior of adolescents is influenced by the larger social context of schools. Its primary focus is on the importance of social integration in anchoring the individual into the social environment, providing them with pro-social sources for identity, efficacy, and social support. To this end, we must take into account how self-concept and identity are dependent on one's social environment, while recognizing the ultimate importance of the school as a stage for public performance and construction of the adolescent identity. We must consider the impact of strain and anomie within this environment, and the often overlooked and underemphasized link between mental health and social organization.

The sociological approach to the problem of self-destructive behavior in schools seeks to reform the very social structure and academic environment within which the students themselves interact. This environment is unaffected by approaches that focus on the individual because the *institution itself* (and the pressures exerted therein) remains unchanged. Approaches that merely address societal responses to deviant behavior (sanctions, punishment) also ignore the source/motivation/root cause of the behavior; we should therefore focus on the social environment that defines and influences the ideals, attitudes, and beliefs of the individual. It is within this environment that actors make themselves known (that is, establish for themselves a firm concept of self) through participating in meaningful activity, and define themselves through their interaction and discourse with others.

The perspective advocated here suggests that it should be the responsibility of the academic institution to see that all students have adequate and equal opportunity to participate in self-affirming activity and identity construction; students who do not have access to these outlets become marginalized within the social institution, and may seek out other "more rewarding role

domains” (Thoits: 1994) to make themselves visible once again. Social integration via student involvement is a crucial element in this task. Student participation in the school environment allows for pro-social sources of visibility, identity, efficacy, and social support, while non-involvement (and relative social isolation) produces a major source of strain in the adolescent social world: *invisibility*. McNeal (1995) argues that student involvement (which he operationalizes as the degree of student participation in extracurricular activities within the school) is both the “most salient aspect of the student’s social bond to the school” as well as a “policy relevant concept [that can be] more easily altered by an individual or the school or both” (63). Mahoney (2000: 533) laments the importance of extracurricular activities: “unlike preventive interventions that attempt to correct academic or social deficits by remedial work, extracurricular activities may foster a positive connection between the individual and school”.

Stinchcombe (1965) connected lack of participation in extracurricular activities with alienation from the academic aspects of school. McNeal (1995) found that student participation in extracurricular activities greatly reduces the chances that the student will drop out of school.<sup>20</sup> Concurrently, Spady (1970) found that levels of student participation in extracurricular activities are a better indicator of educational attainment than are academic ability and performance or socioeconomic background.

This chapter has highlighted the importance of extracurricular activities in anchoring the student into the social environment of the school, and how social integration protects against negative self-concept, feelings of powerlessness, and involvement in delinquency. Chapter 3 will present the conceptual model for the present study and outline the expected relationships and hypotheses.

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<sup>20</sup> More specifically, students participating in athletics are 1.7 times less likely to drop out than non-participants, while students participating in fine-arts activities are 1.2 times less likely (McNeal, 1995).

## CHAPTER THREE: CONCEPTUAL MODEL AND HYPOTHESES

The goal of this dissertation is to examine the sociological factors that might help explain strain, anomie, and delinquency in high schools. Of primary interest is the effect of social integration on self-concept, sense of control, and delinquency. The strain model of delinquency presented in Appendix A follows the path from experience of strain through the development of negative emotions to the associated delinquent coping responses. Consistent with Jang's (2003) model of strain, conditioning factors have been included and emphasized in this process. These conditioning factors -- self-efficacy, locus of control, social support, social control, identity, and visibility -- are elements of *social integration*. The conditioning factors of social integration play a dual role in the strain-delinquency relationship; the benefits of social integration may 1) intervene between a potentially stressful event and a stress reaction "by attenuating or preventing a stress appraisal response"; and 2) "intervene between the experience of stress and the onset of the pathological outcome by reducing or eliminating the stress reaction" (Cohen, 1985: 312).

For the adolescent facing a stressful social environment, the *internalization* of strain and anomie and the associated *externalized* deviant responses should be affected by the presence of the conditioning factors associated with social integration. While I intended to test the effects of social integration on the internalization of strain and the externalized response, the nature of the relationship between the internalization of strain and social integration cannot be clearly determined, as causality cannot be easily inferred from the data. Measuring and objectifying strain *before* it is internalized (that is, identifying stressors in the environment) is difficult, if not impossible; sources of strain outside the school environment are infinite, and perception of strain may vary for each individual; that which has a strong effect on some may have weak/no effect on others. Additionally, strain is best measured once it is internalized. For this reason, I chose not

to focus on the relationship between strain and self-concept as mediated by social integration; while I assume various sources of general strain to be present in the school environment (Eckert, 1989; Agnew, et al, 2002), I emphasize *lack of social integration* (social isolation) as a major source of strain in the adolescent world (Thoits, 1983; Newman, 2004). The notion of social integration as both a *buffering agent* against sources of strain and as a *potential source of strain* (in cases of low integration) will be discussed in the concluding sections of this dissertation.

My examination will focus on the second part of the original model; the effect of social integration within the school on efficacy/locus of control, self-concept and delinquency. This model is presented as the preliminary dissertation model in Appendix A.

There will, no doubt, be considerably interplay between efficacy/locus of control, self-concept, and social integration, especially as they relate to delinquency. Because of the sensitive, overlapping nature of the relationship between these concepts, there will be significant issues in establishing causality. While a relationship can easily be established between these variables, two possibilities present a major challenge to the analyses:

- 1) Students who are involved in school activities may not internalize strain (report more negative self-concept, low efficacy) to the same degree as those who are uninvolved in school activities (consistent with model).
- 2) Students who have a low self-concept or feel powerless (external locus of control, low self-efficacy) may choose *not* to affiliate with school groups/activities to the same degree as those who report more positive self-concept and efficacy (reverse causality).

I intend to resolve this issue through the use of longitudinal data. By comparing social integration (independent variable) at Time One (sophomore year) with self-concept, efficacy/locus of control, and delinquency (dependent variables) at Time Two (senior year), I should be able to examine these relationships in a meaningful way. Put more simply, how does

participation in the school environment during sophomore year affect locus of control, self-concept, and delinquency during senior year? I have targeted three relationships for analysis:

**1) Relationship between social integration (independent variable) and delinquency (dependent variable).**

As level/degree of social integration increases, how does delinquency vary?

**2) Relationship between social integration (independent variable) and delinquency (dependent variable), when controlling for efficacy/locus of control and self concept.**

The purpose of this approach is to examine whether the effect of social integration on delinquency goes beyond merely providing increased self-efficacy (more internalized/greater sense of control) and improved self-concept (which serves as a buffer against delinquency).

**3) Relationship between social integration (independent variable) and**  
**a) efficacy/locus of control (dependent variable).**

**b) self-concept (dependent variable)**

As the level/degree of social integration in the school increases, how does self-efficacy/LOC vary? Do students who are more socially integrated feel better about themselves, and have a greater sense of control and empowerment?

## **HYPOTHESES**

My hypotheses have been supported by Landers and Landers (1978), who found that participation in extracurricular activities was associated with lower levels of delinquent activity,<sup>21</sup> and Thoits (1983), who found that individuals who possess multiple role-identities report significantly less psychological distress. As Hughes and Gove (1981: 50) observe, there is limited literature “dealing directly with the detrimental effects of a relative lack of social

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<sup>21</sup> Students most involved in extracurricular activities were less likely to “deviate from prescribed social norms” (Landers and Landers, 1978: 300)

interaction (i.e., social isolation) on the well-being of the individual”; my aim is to examine the effect of social integration on delinquency, and determine whether this effect is primarily a function of the added sources of positive self-concept, self-efficacy, and sense of control that accompany integration, or additional factors present in social integration itself (such as social support and social control). I argue that students who are more integrated into the social environment of the school (through participation in extracurricular activities) will be more likely to report a more internalized locus of control and more positive self-concept (due to a more stable sense of identity, a higher stake in conformity, and stronger social-support networks), and will thus be less likely to be involved in delinquent behavior.

**H<sub>1</sub>: Higher levels of involvement/participation (social integration) at T<sub>1</sub> result in**

- a) More positive Self-concept at T<sub>2</sub>**
- b) More internalized Locus of Control at T<sub>2</sub>**
- c) Lower involvement in delinquent behavior at T<sub>2</sub>.**

**H<sub>2a</sub>: Of the students who report negative self-concept T<sub>1</sub>, those with higher levels of participation/integration at T<sub>1</sub> will be less likely to report/engage in delinquent activity at T<sub>2</sub>.**

**H<sub>2b</sub>: Of the students who report a more external locus of control at T<sub>1</sub>, those with higher levels of participation/integration at T<sub>1</sub> will be less likely to report/engage in delinquent activity at T<sub>2</sub>.**

These two hypotheses seek to test the theory of social integration as a buffer against delinquency, and reflect the second part of the original Strain Model of Delinquency presented in Appendix A.

**H<sub>3</sub>: Variability between various types of school activities (Sports, Arts, etc) and the delinquency-integration and/or efficacy/self-concept-integration relationship**

I expect some school activities to be associated with lower involvement in delinquent activities due to differential value applied to activities within the school itself.

To explore these relationships and examine these hypotheses, the remainder of this dissertation is organized in the following manner: Chapter 4 will outline the data and methods used to answer my research questions. Chapter 5 presents the research findings and analyses. Chapter 6 discusses the results of my study and presents conclusions. Finally, Chapter 7 discusses the limitations of the present study, and offers some directions for future research.



## **CHAPTER FOUR: METHODOLOGY**

This chapter will focus on the data and methods used in my study. I begin with a description of the data set and sample that I used for my analyses; I then outline how I measured my dependent, independent, and control variables; finally, I discuss the models I employed and the methods of data analysis that I used.

### **DESCRIPTION OF DATA SET**

For the present study, I use data from the National Educational Longitudinal Study (NELS). During the spring term of the 1987-1988 school year, the National Center for Education Statistics (NCES) initiated a national longitudinal study of 8<sup>th</sup> grade students attending 1,052 high schools across the United States. To further enrich the data, students' teachers, parents, and school administrators were also surveyed.

The NELS is a five-wave longitudinal school-based survey examining elements of students' life experiences. The base year survey was administered in 1988 to a nationally representative sample of 26,432 eighth graders. Of the schools that were sampled and agreed to participate, complete 8<sup>th</sup> grade rosters were produced for each school. From these rosters, approximately 24 students were randomly selected. Four follow-up surveys were administered in 1990, 1992, 1994, and 2000. The three in-school waves of data collection coincided with most students' eighth-grade, sophomore, and senior years. Prior to the first follow-up (1990, sophomore year), approximately 90 percent of the students moved from a K-8/junior high school/middle school setting to high school. Because of these transitions, students had to be traced to their new schools. New (freshened) students needed to be added to the sample so that the first follow-up data would be representative of high school sophomores. The sample was

freshened again with additional seniors in 1992 to ensure that the sample would be nationally representative of seniors (<http://nces.ed.gov/surveys/NELS88/pdf/QuickGuide.PDF>).

Specific topics in the NELS include school, work, and home experiences; educational resources and support; neighborhood characteristics; educational and occupational aspirations; and other student perceptions, such as self-concept and locus of control, as well as attitudes towards the future. Additional topics include self-reports on smoking, alcohol and drug use, and delinquent behavior (<http://nces.ed.gov/surveys/nels88/>).

The NELS is an ideal data set for my analysis, since it includes a variety of questions about students' participation in school activities, recognition received within the school environment, and involvement in delinquent activities. There are also sufficient measures of self-efficacy and self-concept.

## **SAMPLE**

The NELS allows for analysis of two years of high school; with an emphasis on the transition through the teenage years and the high school experience, I define my base year population as the respondents' sophomore year (1990), and the follow-up as their senior year (1992). I will be using these subsamples throughout the analysis.

## **MEASUREMENT**

This section will outline the dependent, independent, and control variables used in this study. In Chapter 2, I indentified social integration, self-concept, and efficacy/locus of control as key components in my analysis of destructive behavior of adolescents; the models employed in this study have been developed to reflect the theoretical orientations outlined in Chapter 2, and have evolved from the original strain model presented in Chapter 3 (displayed in Appendices A and B).

All four model groups contain social integration, as measured by participation in extracurricular activities within the school, as the independent variable; the dependent variables, *delinquency in the school*, *self-concept*, and *locus of control*, vary across the four model groups.

## **Dependent Variables**

### **Delinquency**

Howard Becker (1973) presented two conceptions of deviance: one defines deviance in a statistical sense, as anything that falls too far from the mean; the other conceptualizes deviance in the organic sense, as anything that is unhealthy to the larger whole (as a disease to an organic body). These two definitions differ only in presentation and analogy, for at their core lies the real issue; the definition of healthy and average. The problem in defining deviant behavior is the lack of universal grounds for what constitutes healthy or average behavior. Becker criticized the individual-oriented view of deviance, arguing that such an approach “[prevents] us from seeing the judgment itself as a crucial part of the phenomenon” (6); the central fact about deviance, Becker asserts, is that it is created by society (8).

Traditionally, deviance has been defined as “conduct which violates social rules or norms” (Wells, 1978). Following this traditional definition and Becker’s organic view of deviance (i.e., unhealthy or “destructive” behavior to the individual or larger society), I operationalize delinquent behavior as deviant conduct within the school that violates the rules, *and/or* that is unhealthy to the larger school environment (and therefore possibly to the delinquent individual him/herself).

The NELS is a valuable resource for the study of delinquency among adolescents, as it provides a wide array of items that collectively measure delinquency; tardiness, skipping classes, missing school, getting in trouble for not following school rules, and incidents of suspension, detention, and arrest. Students were instructed to indicate the frequency of these event for the

last school year; (0) *never*, (1) *1-2 times*, (2) *3-6 times*, (3) *7-9 times*, (4) *10-15 times*, or (5) *15 times or more*. Incidents of fighting were reported as (0) *never*, (1) *1-2 times*, or (2) *more than 2 times*. Table 4.1 presents the frequencies for school delinquency items.

**Table 4.1: Percentages for School Delinquency Items, 1992**

	Never	1-2 times	3-6 times	7-9 times	10-15 times	15+
Late for school	18.9	33.7	25.6	9.4	5.2	7.2
Cut/skipped classes	50.0	25.7	13.1	4.9	2.9	3.5
Missed school	8.7	30.8	35.0	13.1	7.4	5.0
Got in trouble	66.2	23.7	5.8	2.0	0.9	1.3
Put on in-school suspension	91.1	7.1	1.1	0.3	0.1	0.3
Suspended from school	94.5	4.6	0.6	0.2	0.0	0.2
Transferred for disciplinary reasons	99.0	0.7	0.1	0.1	0.0	0.1
Was arrested	97.0	2.5	0.4	0.1	0.0	0.2
Spent time in juvenile center	99.0	0.7	0.1	0.1	0.0	0.2

N = 14962-15073 (depending on item)

When constructed as a single scale for school delinquency, all nine items yield a Cronbach's alpha of .683. Following Wells and Rankin (1983), I suspected that there were at least two different categories of delinquency within the set; I therefore conducted a principal component factor analysis on the items, revealing two different components.

Wells and Rankin (1983) measured adolescent delinquency by creating a *total delinquency score*, a composite variable that included "school rebelliousness" (generally troublesome, disruptive, disobedient, but not seriously delinquent actions in school) and "school delinquency" (more serious conduct and illegal acts within the school). Following this division, I constructed

two separate measures of school delinquency by combining school delinquency items from the NELS, one for “light school delinquency”, and another for “severe delinquency”. These measures are shown in Table 4.3.

**Table 4.2: Principal Component Matrix(a)**

	Component	
	1	2
1.how many times was r late for school	.395	.660
2. how many times did r cut/skip classes	.462	.604
3. how many times did r miss school	.339	.566
4. how many times r got in trouble	.597	.360
5. how many times put on in-school suspension	.720	.000
6. how many times r suspended from school	.768	-.143
7. r transferred for disciplinary reasons	.722	-.402
8. how many times r was arrested	.759	-.303
9. times r spent time in juvenile center	.763	-.415

Extraction Method: Principal Component Analysis.  
2 components extracted.

**Table 4.3: Items Comprising Measures of Delinquency**

Light Delinquency Score ( $\alpha = .680$ )	Severe Delinquency ( $\alpha = .842$ )
Late for school	Transferred for disciplinary reasons
Cut/skipped classes	Was arrested
Missed school	Spent time in juvenile center
Got in trouble	
Put on in-school suspension	
Suspended from school	

While many studies include some measure of alcohol as a measure of delinquent behavior, Seeman and Anderson (1983) found that high social involvement correlated positively with heavier drinking, contradicting the hypothesis that social integration serves as a buffer against “delinquent behavior” (here defined as heavy use of alcohol). Though Seeman and Anderson’s findings pertained to an adult population, the same effect may apply to the adolescent world. Jessor and Jessor (1977) found that social support is a prominent element in adolescent drinking; both attachment to society and social isolation are predictors for heavy drinking and drinking problems. This creates a potential problem in that some individuals who are socially integrated (and theoretically have more positive self-concept and greater self-efficacy) will exhibit higher levels of alcohol use; this does not fit either the statistical definition of deviant behavior, or the notion of “behavior unhealthy to the larger whole”. Alcohol use, in this sense, is not justified as a delinquent outcome.

Additionally, as adolescents approach adulthood, smoking cigarettes and consumption of alcohol, as behaviors that are legal in the adult world, may come to be seen as *less delinquent/deviant* behaviors. Any increase in involvement in these behaviors as students progress through high school may not necessarily be a sign of increased delinquency, but instead a marker of their approach to adulthood.

For measures of alcohol and drug use, the NELS includes self-reported incidents of smoking, drinking, and marijuana and cocaine use, which were given response categories of *0 occasions, 1-2 occasions, 3-19 occasions, and 20+ occasions*. Table 4.4 presents the frequencies for drug and alcohol use for the 1992 (senior year) respondents. Support for Jessor and Jessor (1977), and Seeman and Anderson (1983) is found in the data; the majority of students, 78%, consumed alcohol in the past 12 months, which, according to Becker’s (1973) statistical definition of delinquency, would render alcohol use as non-delinquent. However, only about

28% of respondents had consumed five drinks or more in one sitting; this falls into both categories of deviance presented by Becker (1973), that which is statistically deviant *and* unhealthy or destructive to the individual and the larger society.

**Table 4.4: 1992 Percentages for Drug and Alcohol Use and Fighting at School**

In the last 12 months, # of times:	0	1-2	3-19	20+
<i>drank alcohol</i>	23.2	26.3	31.9	18.6
<i>used marijuana</i>	82.4	8.0	6.0	3.6
<i>used cocaine</i>	98.0	1.1	0.6	0.3

**At school, # of times under influence of:**

<i>alcohol</i>	87.5	8.7	2.7	1.1
<i>marijuana</i>	93.4	3.6	1.9	1.2
<i>cocaine</i>	99.0	0.4	0.3	0.3

	0 times	1-2 times	2+ times
<b>Got into a fight at school</b>	89.1	8.6	2.4

N = 12592-15073 (depending on item)

Because this study is primarily concerned with delinquency within the school context, I chose not to include general alcohol and drug use as variables for delinquency. The use of alcohol and drugs *at school*, however, is of interest. I examine drug use, alcohol use, and fighting as separate delinquent outcomes. I recoded the responses for “*under the influence of \_\_\_ at school*” and “*fighting at school*” into dichotomous variables; 0 (none) and 1 (any). I suspect that these measures of drug and alcohol use may be a better predictor of delinquency within schools than the general questions (as outlined in Table 4.4). While 76.8% of students admitted using alcohol in the past year, only 13.5% admitted to using alcohol at school; the same (though less pronounced) trend was observed with marijuana use, with the percentage falling from 17.6% to 6.6%. Furthermore, students who attend school under the influence of alcohol or drugs may be responding to undesirable social circumstances through “retreatism” (Figueira-

McDonough, 1993) or “compensation” (Brezina, 1996); these students may be attempting to alleviate the experience of strain and negative affect by countering the effects through the use of drugs/alcohol (which may induce positive emotions or temporarily neutralize negative emotions) (Brezina, 1996).

### **Locus of Control**

Self-efficacy has been defined as the degree to which one perceives him/herself as either *having control over* or *being controlled by* his/her social environment (Gecas, 1989) (Seff, et al, 1992), and a belief in one’s capabilities to exercise control over life events (Ozer and Bandura, 1990).<sup>22</sup> As Gecas (1989) observed, the emphasis on perception of control rather than capability is evident in many theories of self-efficacy. Locus of control focuses on the extent to which the individual sees him/herself as either having control over his/her environment (internal locus of control) or being controlled by his/her it (external locus of control).

My original intention was to consider the effects of self-efficacy as separate from self-concept; while the NELS does not allow for separate measurement of efficacy, it *does* provide a separate measure for “locus of control.” Because self-efficacy and locus of control share what I consider to be the main element in the social integration-delinquency relationship, *a sense of powerlessness*, I am confident that locus of control will suffice in the place of a valid measurement of self-efficacy. Further considerations of self-efficacy and locus of control will be included in the closing sections of this dissertation.

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<sup>22</sup> Seff, et al (1992) outline self-efficacy: “Self-efficacy refers to individuals’ sense of competence, effectiveness, or mastery in dealing with the environment, i.e., the degree to which individuals view themselves as being in control of factors that affect their lives” (574).



The NELS measures of locus of control ranged on a scale from one to four. The measures were constructed by asking respondents whether they 1) *strongly agreed*, 2) *agreed*, 3) *disagreed*, or 4) *strongly disagreed* with the following statements:

*“I don’t have enough control over the direction my life is taking.”*  
*“In my life, good luck is more important than hard work for success.”*  
*“Every time I try to get ahead, something or somebody stops me.”*  
*“My plans hardly ever work out, so planning only makes me unhappy.”*  
*“When I make plans, I am almost certain that I can make them work.”*  
*“Chance and luck are very important for what happens in my life.”*

For the measure of locus of control, I use the pre-constructed composite variable for locus of control provided by the NELS. The variable *F2LOCUS2* is the composite of the above locus of control items for the 1992 (senior year) survey. The item *“When I make plans, I am almost certain I can make them work”* is a reverse scoring item, so the value was reversed before constructing the composite variable. Any students missing all of the components were assigned a missing value for the composite. For the locus of control composite, higher values equate to a more internal locus of control (i.e. greater sense of empowerment and of personal control), lower values equate to a more external locus of control (powerlessness, lower sense of personal control). The six-item scale for locus of control yielded a Cronbach’s Alpha of .743.

### **Self-Concept**

The sociological literature on self-concept sees it as evolving out of social interaction with others, and, in turn, as guiding or influencing one’s behavior (Cooley, 1902) (Mead, 1934) (Kinch, 1963). Self-concept refers to “the totality of the individual’s thoughts and feelings with reference to the self as an object” (Rosenberg, 1989: 34), or, alternatively, as “a multifaceted structure of thoughts, attitudes, images, schemas, or theories regarding the self as an object” (Demo, 1992: 303).

The NELS measures of self-concept ranged on a scale of one to four, and were constructed by asking respondents whether they 1) *strongly agreed*, 2) *agreed*, 3) *disagreed*, or 4) *strongly disagreed* with the following statements:

*“I feel good about myself.”*

*“I feel I am a person of worth, the social equal of other people.”*

*“I am able to do things as well as other people.”*

*“On the whole, I am satisfied with myself.”*

*“I feel useless at times.”*

*“At times, I think I am no good at all.”*

*“I feel I do not have much to be proud of.”*

For my measure of self-concept, I use the pre-constructed composite variable provided by the NELS. The variable *F2CNCPT2* is the composite of the above self-concept items for the 1992 (senior year) survey. The items *“I feel good about myself”*, *“I feel I am a person of worth, the social equal of other people”*, *“I am able to do things as well as other people”*, and *“On the whole, I am satisfied with myself”* are reverse scoring items, so the values were reversed before constructing the composite variable. Any students missing any of the components were assigned a missing value for the composite. For the self-concept composite, higher values equate to a more positive self-concept, lower values equate to a more negative self-concept. The seven-item scale for self-concept yielded a Cronbach’s Alpha of .830.

## **Independent Variable**

### **Social Integration/Participation**

Pearlin and Johnson (1977) included “belonging to voluntary associations” and “having close friends nearby” in their measures of social isolation (integration’s opposite). Latkins and Curry (2003) measured social integration in neighborhoods through church involvement. Lin (2001) operationalized social integration as “network membership”. Hilles and Kahle (1985: 1115) emphasize that role commitment is a crucial element of social integration, without which “the individual cannot become socially integrated into the relationships mandated by the larger

culture”. For adolescents, McNeal (1995: 63) argues that student involvement (which he operationalizes as the degree of student participation in extracurricular activities within the school) is both the “most salient aspect of the student’s social bond to the school” as well as a “policy relevant concept [that can be] more easily altered by an individual or the school or both”.

For the present study, the concept of social integration is measured through the student’s participation in extracurricular activities within the school. Youniss, Yates, and Su (1997: 246) conceptualize social integration within the school as the “extent to which adolescents are involved in peer activities that are school based, sponsored by adults, and supervised by coaches or mentors. Extracurricular activities provide network membership and role commitment for students in the school society, and are the primary arena in which students stake claim to identity (McNeal, 1995; Lippitt and Gold, 1959; Coleman, 1961; Eckert, 1989). For measures of student participation in extracurricular activities, the NELS includes questions about participation in the following activity groups:

1. Athletics
  - a) Varsity
    - (1) Team
    - (2) Individual
  - b) Intramural
    - (1) Team
    - (2) Individual
2. Cheerleading, Pom-Pom
3. Band, orchestra, chorus,
4. Drama, musical
5. Student Government, yearbook/newspaper
6. Service Clubs
7. Academic Clubs
8. Hobby Clubs
9. Vocational Clubs

For each athletic activity, students were asked to indicate whether they 1) [were unable to participate, as] *the school does not offer this activity*, 2) *did not participate*, 3) *participated in intramural sport*, 4) *participated on a junior varsity team*, 5) *participated on a varsity team*, or

6) *participated as a captain, co-captain*. For school clubs or groups, students were asked to indicate 1) [were unable to participate, because] *the school does not offer this activity*, 2) *they did not participate*, 3) *participated*, or 4) *participated as an officer*. Table 4.5 displays the frequencies for student participation across extracurricular activities for sophomore respondents.

**Tables 4.5a and 4.5b: Percentages of Student Involvement in Extracurricular Activities, 1990**

**4.5a: Overview of Participation**

N = 12973-14127 (depending on item)

	<b>did not participate</b>	<b>participated</b>
<b>Any Extracurricular Activity</b>	17.9	82.1
<b>Any Sport</b>	48.3	51.7
<i>Varsity Sport</i>	54.7	45.4
<i>Intramural Sport</i>	87.8	12.2
<b>Cheerleading</b>	92.6	7.4
<b>Other Extracurricular Activity</b>	36.6	63.4

**4.5b: Detailed Summary of Participation**

N = 13516-14573 (depending on item)

	<b>did not participate</b>	<b>participated</b>
Varsity Team Sport	63.6	36.4
Varsity Individual Sport	79.0	21.0
Intramural team Sport	89.6	10.4
Intramural Individual Sport	96.2	3.8
Intramural Cheerleading	98.5	1.5
Band, Orchestra, Choir	77.6	22.4
Drama	88.4	11.6
Student Government	91.9	8.1
Academic Honor Society	91.4	8.6
School Yearbook, Newsp.	90.7	9.3
Service Clubs	87.2	12.8
Academic Clubs	68.1	31.9
Hobby Clubs	92.5	7.5
Vocational Clubs	88.7	11.3

Because of its complex nature, the present study will operationalize social integration in three different ways; *participation*, *degree of participation*, and *type of participation*.

### **Non-participants vs. Participants (0,1)**

For this approach, students are categorized as either “non-participants” (participation in zero extracurricular activities) or participants (participation in one or more extracurricular activities). For questions about student participation, I recoded responses into dichotomous variables: “did not participate” (0), and “participated” (1). For varsity and intramural sports, I created dichotomous variables by collapsing the categories (different sports) into two groups: “participated in none” (0), and “participated in any” (1). Captains, varsity, and junior varsity participants were included together as participants; future research should consider the effects of the authority positions of captain/officer. I constructed the variable “participated in any extracurricular activity” by combining the dichotomous variables for each activity into a “participation score” (ranging from 0-10); I then recoded this overall measure into “participated in none” and “participated in any extracurricular activities”. The “non-participants vs. participants” approach seeks to examine the significance of *any participation* in the social environment as a measure of social integration; is social integration best measured as a dichotomous variable, or is it better conceptualized as a matter of *degree* of participation?

### **Degree of Participation (Identity Accumulation Hypothesis)**

This approach examines differences between various *degrees* of participation across extracurricular activity categories (i.e., does the student who participates in multiple activities have better outcomes than the student who participates in only 1 or 0?). As outlined above, I created an overall participation score through the addition of dichotomous response variables previously constructed for each extracurricular activity group. As the number of activities in which one participates increases, do the outcomes improve (i.e. improved self-concept and

decreased delinquency)? This approach seeks to further examine (and test) Thoits' (1983) *Identity Accumulation Hypothesis*. To review, the *Identity Accumulation Hypothesis* states that the presence of one or more role-identities reduces incidents of anxiety, depression, and disordered behavior (105); each additional identity possessed by a student should provide them with additional roles and sets of behavioral expectations, which in turn guide their behavior and strengthen their "existential security".

The participation score variable was recoded in a 0-6 scale, with the sixth category containing "participated in six or more activities." About 1.4% of students fell into this category.

### **Type of Participation**

Whereas most studies tend to focus on only a few types of extracurricular activities (usually athletics), I intend to test for variation in the relationship between certain *types* of activities and delinquent behavior. While I expect to find a strong relationship between student participation and delinquency, I suspect there to be varying relationships between *types of activities* and delinquency. For example, if some activities are held as "significant cultural events", they stand to provide the participants with more positive visibility within the school, and may be afforded more prestige and higher status in the school's social hierarchy. For this approach, I use the "0,1" categories (non-participant, participant) for each extra-curricular activity (as outlined above); this will allow for comparison of outcomes associated with participation in different types of extracurricular activities.

### **Control Variables**

To account for any effects due to race-ethnicity, sex, or SES, these variables will be included as controls in the analysis. For race-ethnicity, I created dummy variables for "black", "Hispanic", "Asian", and "Native American", with "White" as the reference category. Sex was recoded into a dummy with male as the reference category. A control variable for ability will be

included in the form of standardized test scores (for 1990 math and English). I also added controls for school size, public/private school distinction, and urbanicity. Public-private school distinction was coded “0-1” with public school as the reference category. For urbanicity, I created two dummy variables, “rural” and “urban”, with “suburban” as the reference category.

Because my focus is on the influence of the school environment on delinquency, it is necessary to control for any outside factors that may explain some of the variance. To account for any effect of parental involvement, I created a composite variable from the following items: sophomore respondents were asked to indicate how often their parents a) attended a school meeting, and b) volunteered at school. Available responses were *zero, once or twice, and more than twice*.

One challenge that arises in this study is the presence of outside influences such as community involvement as a source of social control, stable identity, and social support for students. If a student is relatively isolated within the school yet is highly involved and integrated within the larger community, how does this external involvement affect his/her delinquency and sense of efficacy? Using the measures provided by the NELS, I created a “community involvement” score, based on the items below. The Cronbach’s alpha for these items when combined to create the scale was .562.

Respondents were asked to indicate how often they spend time on the following activities outside of school; available responses were “*never*”, “*less than once a week*”, “*once/twice a week*”, and “*almost every day*” (1-4).

- Working on hobbies, arts, or crafts.
- Going to the park, gym, or pool.
- Playing ball or other sports with friends.
- Attending Youth groups or recreational programs.
- Volunteering or performing community service.
- Taking classes: music, art, or dance.
- Taking sports lessons.

I also included controls for church attendance (responses ranged from “*none*” to “*more than once a week*”), and student employment (coded “0-1”, for “no, yes”). To account for any difficulty students may have in becoming socially integrated in school that are a result of factors outside the school itself, I included controls for “family relocated” in 1990, and “student changed schools” in 1992. Both of these variables were coded “0-1”.

## **ANALYTICAL STRATEGY**

Following the primary relationships of interest and hypotheses outlined in Chapter 3, I have divided my analytical approach into four steps, with four corresponding model groups.

1. The first group of models examines the relationship between social integration in the school and school delinquency. This relationship is outlined in Model 1.

### **Integration-Delinquency Models:**

- I. Participant vs. Non Participants (0,1)
  - (1) Light School Delinquency (0-9, *composite score*)
  - (2) Severe Delinquency (0,1)
  - (3) Fighting at School (0,1)
  - (4) Under Influence at School (0,1, *for each substance*)
- II. Participation Score (0-6, score)
  - (1) Light School Delinquency
  - (2) Severe Delinquency
  - (3) Fighting at School
  - (4) Under Influence at School
- III. Participation in Different Domains (*comparison of activity types, 0,1 vs 0,1, etc*)
  - (1) Light School Delinquency
  - (2) Severe Delinquency
  - (3) Fighting at School
  - (4) Under Influence at School

2. For the second group of models, *I include controls for self-concept and locus of control.*

This approach seeks to identify how much of the effect of integration on delinquency is



actually due to improved self-concept and locus of control. These relationships are outlined in Model 2.

3. Following the second group of models, which examine the role of locus of control and self-concept in the integration-delinquency relationship, the third group of models (Model 3) **looks at the effect of integration on locus of control and self-concept.**

#### **Locus of Control, Self-Concept Models:**

- I. Participant vs. Non Participants (*0,1*)
  - (1) Locus of Control
  - (2) Self Concept
- II. Participation Score (0-6)
  - (1) Locus of Control
  - (2) Self Concept
- III. Participation in Different Activity Types (*0,1* vs *0,1*, etc)
  - (1) Locus of Control
  - (2) Self Concept

In order to account for the effects of the dependent variables (self-concept and locus of control) at T<sub>1</sub> on those at T<sub>2</sub> (for instance, negative self-concept senior year could simply be a function of negative self-concept carried over from sophomore year), I added controls for these variables to Model 3b. While the literature suggests (and preliminary analyses confirmed) that locus of control and self-concept are highly correlated, I chose to examine them as separate entities in these models. The intimate (and clouded) relationship between self-concept and locus of control will be discussed in the closing sections of this dissertation.

4. The last group of models looks at the buffering hypothesis of social integration. By examining a sub-population of individuals demonstrating (reporting) low self-concept and a more externalized locus of control (low sense of personal control, greater sense of

powerlessness), I will be able to isolate the effects of participation/social integration *as a buffer* between low self-concept, eternalized locus of control, and delinquent behavior.

These relationships are outlined in Model 4.

## METHOD OF ANALYSIS

Models containing *fighting, use of drugs and alcohol at school, and severe delinquency* as dependent variables yield dichotomous outcomes, for which the response categories are binary (coded 0,1). For these models, I use logit and logistic regression, as is appropriate when the dependent variables are dichotomous in nature (Vogt, 2005).

For models with *light delinquency score, self-concept, and locus of control* as dependent variables, I use linear regression. Each of these dependent variables is continuous, and there is a single, linear predictor variable for each model (social integration as *participation and as degree of participation, or "participation score"*). For models that contain social integration as *type of participation*, I use multiple linear regression, as there are multiple predictor variables (representing each of the extracurricular activities).

Tables 4.6 and 4.7 display the descriptive statistics for the sample. The remainder of this dissertation is organized in the following manner. Chapter 5 will present the empirical findings of my analysis, including a review of the relationships of interest and hypotheses. Chapter 6 will include a summary of the results and a discussion of their implications. Finally, Chapter 7 will discuss the limitations of the present study and proposes possible directions for future research.

## DESCRIPTIVE STATISTICS

**Table 4.6: Descriptive Statistics**

Variable	Mean	Standard Deviation	Range
<b>Dependent Variables</b>			
Light Delinquency Score	5.23	3.57	0-16
Severe Delinquency	0.04	0.19	0-1
Alcohol at School	0.12	0.33	0-1
Marijuana at School	0.07	0.25	0-1
Cocaine at School	0.01	0.10	0-1
Fighting at School	0.11	0.31	0-1
<b>Independent Variables</b>			
Participated in:			
Any Extracurricular activity?	0.82	0.38	0-1
Number of Activities (0-6+)	1.81	1.44	0-6
Self Concept 1990	0.02	0.68	-2.95-1.35
Locus of Control 1990	0.06	0.63	-2.66-1.46
Self Concept 1992	0.02	0.69	-3.69-1.24
Locus of Control 1992	0.07	0.63	-3.02-1.43
<b>Control Variables</b>			
Standardized Test Score Composite 1990	51.66	9.69	30.31-71.82
Relocated 1990	0.18	0.39	0-1
Changed Schools 1992	0.09	0.28	0-1
Parental Involvement Score	1.03	1.14	0 - 4
Community Involvement Score	7.09	3.74	0-16
Currently Employed 1990?	0.27	0.44	0-1
Church Attendance 1990	2.62	1.79	0-5
SES Composite	0.06	0.76	-3.29-2.76
School Enrollment 1990	4.64	2.39	1-9

N=13120-15127 (depending on item)

**Table 4.7: Descriptive Statistics for Demographic Variables**

<b>Sex</b>		
	<i>(Male)</i>	49.93
	<i>Female</i>	50.07
<b>Race</b>		
	<i>Asian, Pacific Islander</i>	4.19
	<i>Hispanic</i>	9.59
	<i>Black, not Hispanic</i>	11.59
	<i>(White, not Hispanic)</i>	73.77
	<i>Native American, Alaskan</i>	0.86
<b>School Classification</b>		
	<i>(Public)</i>	89.27
	<i>Private</i>	10.73
<b>Type of School District</b>		
	<i>Urban</i>	28.16
	<i>(Suburban)</i>	41.49
	<i>Rural - Outside MSA</i>	30.35
<b>Entire School Enrollment</b>		
	<i>1 - 399</i>	12.71
	<i>400 - 599</i>	11.14
	<i>600 - 799</i>	10.93
	<i>800 - 999</i>	12.33
	<i>1000 - 1199</i>	14.34
	<i>1200 - 1599</i>	14.65
	<i>1600 - 1999</i>	11.51
	<i>2000 - 2499</i>	7.35
	<i>2500 +</i>	5.58

N=15105-15286 (depending on item)

## **CHAPTER FIVE: FINDINGS**

This chapter will present the results of my analyses, and examine the influence of social integration on delinquent behavior, locus of control, and self-concept. The results of preliminary bivariate analyses can be found in Appendix B. The first stage of the analysis includes Models 1 and 2, and examines the relationship between social integration and delinquent behavior. In the next stage, I shift the analysis to social integration and the self, examining the relationship between participation in extracurricular activities and 1) locus of control and 2) self-concept (Model 3). In the third and final stage, I take a closer look at the relationship between delinquency and the self by examining the effect of participation on delinquency among students who reported low self-concept and feelings of powerlessness during sophomore year (Model 4).

### **CONTROL MODELS**

Before beginning my analyses, I examined the relationships between my dependent variables and the control variables. These variables will appear in all subsequent models, but I will limit my discussion to this section and return to these considerations in my conclusions.

#### **Light Delinquency**

Table 5.1 presents the OLS regression results for the effects of the control variables on the light delinquency score. Hispanic students were more likely to be involved in light delinquency than white students, while African American students were less likely. Female students were less likely to be involved in light delinquency than male students.

School size was associated with higher light delinquency scores, suggesting that the larger the school in which the student is enrolled, the more likely he/she is to commit light delinquency. Rural schools were associated with lower levels of light delinquency as compared to suburban schools.

**Table 5.1: OLS Regression Results for the Effects of Control Variables on Light Delinquency**

	Light Delinquency	
	$\beta$	s.e.
<b>Control Variables</b>		
Asian	-0.001	0.200
Hispanic	0.460 **	0.170
African American	-0.672 ***	0.184
Native American	0.213	0.441
SES	0.134 *	0.064
Female	-0.459 ***	0.089
School Enrollment	0.101 ***	0.024
Private	0.382 *	0.178
Urban	-0.131	0.132
Rural	-0.470 ***	0.103
Standardized Test Score	-0.055 ***	0.005
Relocated? 1990	0.180	0.138
Changed Schools? 1992	0.563 *	0.250
Currently Employed? 1990	0.550 ***	0.099
Church Attendance 1990	-0.235 ***	0.027
Parental Involvement 1990	-0.207 ***	0.039
Community Involvement 1990	0.065 ***	0.013
Constant	8.097	0.327
R <sup>2</sup>	0.0739	

\* p<.05

N=11505

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

Students who changed schools had higher light delinquency scores. SES was positively associated with light delinquency, suggesting that the higher the SES of the student, the greater his/her involvement in light delinquency.

Standardized test scores, church attendance, and parental involvement in school were all associated with decreased incidents of light delinquency; in other words, as these factors increased, light delinquency decreased.

Students who were more involved in the community reported higher light delinquency scores, as did students who were employed. While this association seems surprising, it could be that some of the community involvement was not by choice, and was instead a disciplinary action as a punishment for delinquency in school (community service). The higher light delinquency scores for students who are employed may be a result of exposure to different sets of social norms, scripts, and stressors that accompany employment outside the school environment.

## **Severe Delinquency**

Table 5.2 presents the results for the Logit regression analysis of the effects of the control variables on severe delinquency. Hispanic and African American students had lower log odds of committing severe delinquency than white students, and female students had lower log odds of committing severe delinquency than male students. Higher standardized test scores and church attendance were associated with lower log odds of severe delinquency. School size was positively associated with severe delinquency, suggesting that the larger the school in which the student is enrolled, the more likely he/she is to commit severe delinquency. Student employment was associated with involvement in severe delinquency.

There was consistency between many of the background variables and both light and severe delinquency. African American and female students were less likely to commit either

type of delinquency when compared to white students and male students, respectively. School enrollment and student employment were positively associated with both types of delinquency, while church attendance and standardized test scores bore a negative association.

### **Fighting at School**

Table 5.3 presents the results for the Logit regression analysis of the effects of the control variables on fighting at school. There were few significant relationships found between the control variables and fighting at school. Female students were less likely to get into fights at school than male students, as were students who had higher standardized test scores. As with light delinquency, community involvement was associated with more frequent fighting at school.

### **Under the Influence of Alcohol, Marijuana, and Cocaine at School**

Table 5.4 presents the results for the Logit regression analysis of the effects of the control variables on being under the influence of alcohol, marijuana, and cocaine at school. Asian students were less likely to use alcohol at school than white students. Hispanic students were more likely to use cocaine at school than white students. African Americans students were less likely to use marijuana at school than white students. SES was positively associated with marijuana use at school, suggesting that higher level SES is associated with more frequent use of marijuana at school. Female students were less likely to use alcohol, marijuana, and cocaine at school than male students. Students who attended rural schools were less likely to use marijuana at school than students who attended suburban schools. Students attended smaller schools were more likely to use alcohol at school. Higher standardized test scores were associated with less use of alcohol, marijuana, and cocaine at school. Student employment was associated with more frequent use of alcohol and marijuana at school. Church attendance was associated with less frequent use of alcohol and marijuana at school. Parental involvement in school was associated with less frequent use of marijuana at school.



**Table 5.2: Logit Regression Results for the Effects of Control Variables on Severe Delinquency**

	Severe Delinquency	
	$\beta$	s.e.
<b>Control Variables</b>		
Asian	-0.807	0.359
Hispanic	-0.805 ***	0.251
African American	-0.641 *	0.280
Native American	0.234	0.488
SES	0.016	0.122
Female	-1.435 ***	0.180
School Enrollment	0.073 *	0.036
Private	-0.068	0.281
Urban	0.009	0.222
Rural	-0.144	0.186
Standardized Test Score	-0.078 ***	0.009
Relocated? 1990	0.211	0.232
Changed Schools? 1992	0.337	0.222
Currently Employed? 1990	0.450 **	0.166
Church Attendance 1990	-0.140 **	0.047
Parental Involvement 1990	0.030	0.075
Community Involvement 1990	0.034	0.025
Constant	0.689	0.466

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

N=11625

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

## **Locus of Control and Self-Concept**

Table 5.5 presents the OLS regression results for the effects of the control variables on self-concept and locus of control. Asian students reported a more externalized locus of control than white students, while Native Americans reported a more internalized locus of control. African American and Hispanic students reported more positive self-concept than did white students. Female students reported more negative self-concepts than did males, but reported a more internalized locus of control; although they feel worse about themselves, they feel that they have more control over their own lives.

Students who attended urban schools were more likely to report an internalized locus of control than students who attended suburban. Higher standardized test scores were associated with a more positive self-concept and a more internalized locus of control. Church attendance had no effect on self-concept, but was associated with a more internalized locus of control. Parental involvement in school and student involvement in the community were both associated with more positive self-concept and a more internalized locus of control.

## **Summary of Control Variables**

Throughout the analyses, many of the background variables demonstrate significant relationships to my dependent variables. Females exhibited lower levels of all forms of delinquency than did males. Students with higher standardized test scores had lower levels of all forms of delinquency (with the exception of fighting at school), as did those who attended church more frequently. I will return to considerations of these variables and relationships in Chapter 7.

## **SOCIAL INTEGRATION AND DELINQUENCY**

This section will present the findings for Models 1 and 2, which examine the relationship between participation in extracurricular activities during sophomore year and delinquent

**Table 5.3: Logit Regression Results for the Effects of Control Variables on Fighting at School**

	<b>Fighting at School</b>	
	<b>β</b>	<b>s.e.</b>
<b>Control Variables</b>		
Asian	-0.204	0.245
Hispanic	0.119	0.160
African American	-0.005	0.171
Native American	0.257	0.371
SES	-0.076	0.074
Female	-1.335 ***	0.095
School Enrollment	-0.004	0.023
Private	0.229	0.188
Urban	-0.073	0.129
Rural	-0.169	0.110
Standardized Test Score	-0.062 ***	0.005
Relocated? 1990	0.118	0.143
Changed Schools? 1992	0.178	0.195
Currently Employed? 1990	0.090	0.096
Church Attendance 1990	-0.051	0.027
Parental Involvement 1990	0.016	0.049
Community Involvement 1990	0.035 **	0.014
Constant	1.266	0.318

\* p<.05

N=11634

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.4: Logit Regression Results for the Effects of Control Variables on Alcohol, Marijuana, and Cocaine Use at School**

	Alcohol at School		Marijuana at School		Cocaine at School	
	$\beta$	s.e.	$\beta$	s.e.	$\beta$	s.e.
<b>Control Variables</b>						
Asian	-0.485 *	0.218	-0.389	0.226	0.443	0.531
Hispanic	0.017	0.148	0.007	0.190	1.050 **	0.372
African American	-0.284	0.197	-0.529 *	0.262	-0.145	0.432
Native American	-0.478	0.376	0.156	0.398	0.343	0.979
SES	0.099	0.069	0.323 ***	0.097	-0.050	0.198
Female	-0.583 ***	0.090	-0.484 ***	0.133	-0.876 ***	0.273
School Enrollment	-0.046 *	0.023	0.005	0.031	-0.100	0.067
Private	0.219	0.167	-0.003	0.230	-0.309	0.564
Urban	-0.129	0.128	-0.249	0.171	-0.517	0.371
Rural	-0.105	0.106	-0.555 ***	0.156	-0.463	0.334
Standardized Test Score	-0.024 ***	0.005	-0.039 ***	0.007	-0.072 ***	0.014
Relocated? 1990	-0.203	0.132	-0.061	0.175	-0.648	0.402
Changed Schools? 1992	-0.188	0.186	0.280	0.215	-0.518	0.545
Currently Employed? 1990	0.194 *	0.093	0.369 **	0.129	0.603 *	0.236
Church Attendance 1990	-0.131 ***	0.023	-0.158 ***	0.033	-0.171 *	0.069
Parental Involvement 1990	-0.046	0.044	-0.231 ***	0.065	-0.116	0.134
Community Involvement 1990	0.033 **	0.012	0.003	0.019	0.020	0.034
Constant	-0.003	0.286	0.256	0.402	0.060	0.785

\* p<.05

N=10920

N=10454

N=10439

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.5: OLS Regression Results for the Effects of Control Variables on Self-Concept and Locus of Control (1992)**

	Self-Concept 1992		Locus of Control 1992	
	$\beta$	s.e.	$\beta$	s.e.
<b>Control Variables</b>				
Asian	-0.082	0.045	-0.123 ***	0.032
Hispanic	0.148 ***	0.035	0.058	0.034
African American	0.310 ***	0.038	0.050	0.032
Native American	0.096	0.124	0.168 *	0.074
SES	-0.001	0.015	-0.007	0.015
Female	-0.172 ***	0.019	0.101 ***	0.016
School Enrollment	0.006	0.005	0.003	0.004
Private	-0.017	0.046	0.002	0.035
Urban	0.025	0.028	0.057 *	0.023
Rural	-0.024	0.023	0.011	0.020
Standardized Test Score	0.012 ***	0.001	0.016 ***	0.001
Relocated? 1990	0.000	0.032	-0.025	0.030
Changed Schools? 1992	-0.027	0.049	-0.013	0.037
Currently Employed? 1990	0.001	0.022	0.030	0.018
Church Attendance 1990	0.006	0.005	0.018 ***	0.005
Parental Involvement 1990	0.034 ***	0.009	0.032 ***	0.007
Community Involvement 1990	0.015 ***	0.003	0.010 ***	0.002
Constant	-0.719	0.073	-0.994	0.072
R <sup>2</sup>	0.070		0.0884	

\* p<.05

N=10933

N=10929

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

behavior during senior year. Model 2 is identical to Model 1, but also includes indicators for locus of control and self-concept for senior year.

## **Light Delinquency**

Table 5.6 presents the results for the OLS regression analysis of light delinquency score with participation coded as a “0-1” dummy variable. The effect of participating in *any* activity (as compared to participating in no activities) was significant at the  $p < .001$  level in Model 1a, and at the  $p < .01$  level in Model 2a, suggesting that participation in *any* extracurricular activity during the sophomore year is associated with a decrease in light delinquency in the senior year. The coefficient for participation in Model 1a indicates that participating in extracurricular activities decreases the light delinquency score by .519 units. Put another way, even after we consider differences in race, gender, SES, school characteristics and location, academic performance, student employment, student church attendance, parental involvement in school, and student involvement in the community, involvement in light delinquency is greater for students who did not participate in *any* extracurricular activity during their sophomore year. In Model 2a, participation remains significant (though less so), despite the introduction of indicators for self-concept and locus of control (senior year); the coefficient for Model 2a indicates a .451 unit reduction in the light delinquency score for students who participate in extracurricular activities. The decrease in size of the participation coefficient indicates that the self-concept and locus of control variables explain some, but not all, of the relationship between activities and delinquency; in other words, there is more to extracurricular participation than merely improved self-concept and more internalized locus of control. The  $R^2$  increases slightly from Model 1a (.076) to Model 2a (.086) with the inclusion of measures for self-concept and locus of control.

Table 5.7 presents results from the OLS regression analysis of the light delinquency score with the total number of activities (ranging from 0-6) as the independent variable. The effect of participating in *multiple activities* was significant at the  $p < .001$  level in Model 1b, and at the  $p < .01$  level in Model 2b, suggesting that the number of extracurricular activities in which one participates during their sophomore year is associated with decreases in light delinquency in their senior year. The coefficient for the participation score in Model 1a indicates a .123 unit decline in the light delinquency score for each additional activity in which one participates. Students who participate in six activities, for instance, will, on average, exhibit a .738 unit decrease in their light delinquency score over students who participate in zero activities. In Model 2b, the participation score remains significant (though less so), despite the introduction of indicators for self-concept and locus of control (senior year). The coefficient for the participation score is reduced slightly with the inclusion of these variables ( $\beta = -.116$ ). Again, the addition of these variables explains some, but not all, of the relationship between activities and delinquency. The  $R^2$  increased slightly from Model 1b (.075) to Model 2b (.086) with the inclusion of indicators for self-concept and locus of control.

For both Models 1 and 2, senior year self-concept was not significantly related to light delinquency, but senior year locus of control was significant at the  $p < .001$  level. This implies that, in terms of self-concept, students who are involved in light delinquency are no different from students who are not involved in light delinquency, and that students with a more externalized locus of control (a greater sense of powerlessness) are more likely to be involved in light school delinquency.

### **Severe Delinquency**

Table 5.8 presents the results for the logistic/logit regression analysis of severe delinquency with participation in extracurricular activities (coded as 0-1) as the independent

**Table 5.6: OLS Regression Results for the Effects of Extracurricular Activity Participation on Light Delinquency**

	<b>Model 1a</b>		<b>Model 2a</b>	
<b>Light Delinquency Score</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Any Extracurricular Activity? 1990	-0.519 ***	0.138	-0.451 **	0.143
<b>Control Variables</b>				
Asian	-0.037	0.211	-0.012	0.213
Hispanic	0.421	0.179	0.478 **	0.186
African American	-0.657 ***	0.198	-0.577 **	0.207
Native American	0.098	0.465	0.237	0.468
SES	0.179 **	0.067	0.185 **	0.067
Female	-0.358 ***	0.093	-0.278 **	0.096
School Enrollment	0.088 ***	0.026	0.098 ***	0.027
Private	0.323	0.186	0.324	0.190
Urban	-0.107	0.139	-0.053	0.138
Rural	-0.492 ***	0.105	-0.402 ***	0.107
Standardized Test Score 1990	-0.053 ***	0.006	-0.042 ***	0.006
Relocated? 1990	0.199	0.146	0.147	0.147
Changed Schools? 1992	0.461	0.257	0.379	0.286
Currently Employed? 1990	0.528 ***	0.101	0.495 ***	0.099
Church Attendance 1990	-0.236 ***	0.028	-0.214 ***	0.028
Parental Involvement 1990	-0.189 ***	0.041	-0.197 ***	0.040
Community Involvement 1990	0.068 ***	0.014	0.071 ***	0.014
Self Concept 1992			-0.010	0.088
Locus of Control 1992			-0.647 ***	0.099
Constant	8.382	0.350	7.567	0.369
R <sup>2</sup>	0.076		0.086	

\* p<.05

N= 10242

N= 9607

\*\* p < .01

\*\*\*p<.001

Note: the weight f2flpnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988



**Table 5.7: OLS Regression Results for the Effects of Extracurricular Activity Participation on Light Delinquency**

	<b>Model 1b</b>		<b>Model 2b</b>	
<b>Light Delinquency Score</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Extracurricular Activity Score 1990	-0.123 ***	0.036	-0.116 ***	0.033
<b>Control Variables</b>				
Asian	0.013	0.212	0.034	0.213
Hispanic	0.424 *	0.179	0.478 **	0.185
African American	-0.646 **	0.204	-0.568 **	0.211
Native American	0.108	0.462	0.250	0.466
SES	0.176 **	0.067	0.184 **	0.067
Female	-0.323 ***	0.094	-0.243 *	0.096
School Enrollment	0.086 ***	0.026	0.097 ***	0.027
Private	0.315	0.187	0.318	0.191
Urban	-0.097	0.140	-0.042	0.138
Rural	-0.476 ***	0.106	-0.384 ***	0.107
Standardized Test Score 1990	-0.052 ***	0.006	-0.041 ***	0.006
Relocated? 1990	0.187	0.147	0.135	0.147
Changed Schools? 1992	0.467	0.262	0.384	0.291
Currently Employed? 1990	0.533 ***	0.101	0.499 ***	0.099
Church Attendance 1990	-0.238 ***	0.028	-0.215 ***	0.028
Parental Involvement 1990	-0.179 ***	0.041	-0.187 ***	0.040
Community Involvement 1990	0.072 ***	0.014	0.074 ***	0.014
Self Concept 1992			-0.011	0.088
Locus of Control 1992			-0.646 ***	0.099
Constant	8.069	0.348	7.288	0.368
R <sup>2</sup>	0.075		0.086	

\* p<.05

N= 10242

N= 9607

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

variable. The effect of *any* participation (as compared to participating in no activities) was *not significant* in either Model 1a or Model 2a, suggesting that the number of activities in which a student participates during his/her sophomore year *is not* related to involvement in severe delinquency during his/her senior year.

Table 5.9 presents the results for the logistic/logit regression analysis of severe delinquency with the activity participation score as the independent variable. The effect of participation was *not significant* in either Model 1b or Model 2b, suggesting that participation in extracurricular activities during the sophomore year *is not* related to severe delinquency in the senior year.

For both Models 1 and 2, self-concept was not significantly related to involvement in severe delinquency, but locus of control was significant at the  $p < .001$  level. This implies that there is no relationship between self-concept and involvement in severe delinquency, but students with a more externalized locus of control (a greater sense of powerlessness) are more likely to commit severe delinquency. The coefficients for locus of control in Models 2a and 2b indicate that as one's locus of control becomes more internalized, the log odds of committing severe delinquency decreases.

## **Fighting at School**

Table 5.10 presents the results for the logistic/logit regression of fighting at school with participation in activities (0-1) as the independent variable. The effect of *any* participation was significant at the  $p < .01$  level in Model 1a, and at the  $p < .05$  level in Model 2a; the coefficient suggests that participation in *any* extracurricular activity in the sophomore year is related to a .324 unit decrease in the log odds of fighting in the senior year. In Model 2a the coefficient decreases slightly in effect size ( $\beta = -.317$ ), but participation remains significant, despite the

introduction of indicators for self-concept and locus of control; these variables explain part, but not all, of the relationship between participation in activities and fighting.

Table 5.11 presents the results for the logistic/logit regression of fighting at school with the activity participation score as the independent variable. The effect of participation was not significant in Model 1b or Model 2b, suggesting that participating in multiple extracurricular activities sophomore year is unrelated to fighting senior year. While the effect of participating in *any extracurricular* activity (versus none) was significantly related to a decreased log odds of fighting at school in the senior year, the effect of participation in additional activities (outside of the first) is non-significant.

For both Models 1 and 2, self-concept was not significantly related to fighting at school, but locus of control was significant at the  $p < .001$  level. This implies that there is no relationship between self-concept and fighting at school, but students with a more externalized locus of control are more likely to get into fights at school than students who have a more internalized locus of control (greater sense of empowerment). The coefficients for locus of control in Models 2a and 2b indicate that as one's locus of control becomes more internalized, the log odds of fighting decreases.

### **Under the Influence of Alcohol, Marijuana, and Cocaine at School**

Tables 5.12a, b, and c present the results for the logistic/logit regression of alcohol, marijuana, and cocaine use at school with participation in any extracurricular activity as the independent variable. For alcohol use at school, I found no significant effect for participation in activities in either Model 1a or Model 2a. For both marijuana use at school and cocaine use at school during the senior year, the effect of *any* participation is significant at the  $p < .05$  level for both Model 1a and Model 2a, suggesting that participation in *any* extracurricular activity in the

sophomore year is related to decreased log odds of using marijuana and cocaine at school during the senior year.

Tables 5.13a, b, and c present the results for the logistic/logit regression of alcohol, marijuana, and cocaine use at school with the activity participation score as the independent variable. For alcohol use at school in the senior year, the effect of the participation variable was not significant in either Model 1b or Model 2b. For marijuana use at school, the effect of participation was significant at the  $p < .001$  level in Model 1b, suggesting that the number of activities in which one participates during the sophomore year is related to decreased log odds of using marijuana at school for the senior year. The coefficient for the participation score in Model 1b indicates a .223 unit reduction in the log odds of using marijuana at school for each activity one participates in. The participation score coefficient decreased slightly with the inclusion of indicators for self-concept and locus of control ( $\beta = -.209$ ), but remained significant at the  $p < .001$  level. For cocaine use at school during the senior year, the effect of participation was not significant in either Model 1b or Model 2b.

For both measures of participation, the indicator for locus of control was significantly related to the log odds of being under the influence of alcohol and marijuana at school at the  $p < .001$  level, and was significant at the  $p < .05$  level for cocaine use at school. There was no association between self-concept and any of the dependent variables.

While it may seem surprising that alcohol use at school is the only variable not affected by participation in extracurricular activities, this supports Jessor and Jessor's (1977) assertion that adolescent drinking provides much needed social support, thus serving as a *buffer against delinquent behavior*.

**Table 5.8: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Severe Delinquency (1992)**

	Model 1a				Model 2a			
Severe Delinquency	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Any Extracurricular Activity? 1990	-0.088	0.200	0.916	0.183	0.005	0.215	1.005	0.216
<b>Control Variables</b>								
Asian	-1.002 *	0.422	0.367 *	0.155	-1.131 *	0.476	0.323 *	0.154
Hispanic	-0.891 ***	0.277	0.410 ***	0.114	-0.768 **	0.294	0.464 **	0.137
African American	-0.490	0.298	0.613	0.183	-0.552	0.309	0.576	0.178
Native American	-0.347	0.631	0.707	0.446	-0.193	0.638	0.824	0.526
SES	0.090	0.130	1.095	0.142	0.038	0.136	1.038	0.141
Female	-1.421 ***	0.196	0.241 ***	0.047	-1.427 ***	0.210	0.240 ***	0.050
School Enrollment	0.069	0.040	1.071	0.043	0.089 *	0.043	1.093 *	0.047
Private	0.089	0.296	1.093	0.324	0.042	0.312	1.043	0.325
Urban	-0.036	0.241	0.964	0.232	-0.005	0.252	0.995	0.251
Rural	-0.219	0.196	0.803	0.158	-0.024	0.207	0.976	0.202
Standardized Test Score 1990	-0.075 ***	0.010	0.928 ***	0.009	-0.060 ***	0.011	0.942 ***	0.010
Relocated? 1990	0.286	0.247	1.332	0.329	0.203	0.270	1.225	0.331
Changed Schools? 1992	0.417	0.234	1.517	0.356	0.389	0.252	1.475	0.371
Currently Employed? 1990	0.409 *	0.176	1.506 *	0.265	0.372 *	0.186	1.451 *	0.270
Church Attendance 1990	-0.171 ***	0.051	0.843 ***	0.043	-0.154 **	0.054	0.857 **	0.046
Parental Involvement 1990	0.064	0.077	1.066	0.082	0.047	0.073	1.048	0.077
Community Involvement 1990	0.030	0.025	1.031	0.026	0.028	0.026	1.029	0.027
Self Concept 1992					-0.055	0.133	0.946	0.126
Locus of Control 1992					-0.638 ***	0.136	0.528 ***	0.072
Constant	0.683	0.515			-0.378	0.527		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 10342

N= 9696

Note: the weight f2flpnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.9: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Severe Delinquency (1992)**

	Model 1b				Model 2b			
Severe Delinquency	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Extracurricular Activity Score 1990	0.016	0.074	1.016	0.075	0.021	0.062	1.021	0.063
<b>Control Variables</b>								
Asian	-1.004 *	0.423	0.366 *	0.155	-1.138 *	0.478	0.321 *	0.153
Hispanic	-0.898 ***	0.278	0.407 ***	0.113	-0.770 **	0.294	0.463 **	0.136
African American	-0.501	0.299	0.606	0.181	-0.558	0.304	0.572	0.174
Native American	-0.354	0.636	0.702	0.446	-0.201	0.640	0.818	0.523
SES	0.088	0.131	1.092	0.143	0.036	0.136	1.037	0.141
Female	-1.429 ***	0.198	0.240 ***	0.047	-1.434 ***	0.209	0.238 ***	0.050
School Enrollment	0.072	0.040	1.074	0.043	0.091 *	0.043	1.095 *	0.047
Private	0.091	0.295	1.095	0.323	0.044	0.312	1.045	0.326
Urban	-0.034	0.240	0.967	0.232	-0.005	0.252	0.995	0.250
Rural	-0.222	0.197	0.801	0.158	-0.027	0.207	0.973	0.202
Standardized Test Score 1990	-0.076 ***	0.010	0.927 ***	0.009	-0.061 ***	0.011	0.941 ***	0.010
Relocated? 1990	0.283	0.246	1.327	0.327	0.204	0.271	1.226	0.332
Changed Schools? 1992	0.419	0.234	1.521	0.356	0.391	0.252	1.478	0.373
Currently Employed? 1990	0.408 *	0.175	1.504 *	0.263	0.371 *	0.186	1.450 *	0.270
Church Attendance 1990	-0.171 ***	0.050	0.843 ***	0.042	-0.154 **	0.054	0.858 **	0.046
Parental Involvement 1990	0.057	0.071	1.058	0.075	0.042	0.073	1.043	0.076
Community Involvement 1990	0.026	0.024	1.027	0.025	0.026	0.026	1.026	0.026
Self Concept 1992					-0.054	0.132	0.947	0.125
Locus of Control 1992					-0.641 ***	0.135	0.527 ***	0.071
Constant	0.654	0.501			-0.371	0.518		
R <sup>2</sup>								
R <sup>2</sup> Change								

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 10342

Note: appropriate sample weights were used in all analyses

Source: National Educational Longitudinal Study of 1988

N= 9696

**Table 5.10: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Fighting at School (1992)**

	Model 1a				Model 2a			
<b>Fighting at School</b>	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Any Extracurricular Activity? 1990	-0.324 **	0.124	0.724 **	0.090	-0.317 *	0.134	0.728 *	0.098
<b>Control Variables</b>								
Asian	-0.114	0.267	0.892	0.239	-0.011	0.281	0.989	0.278
Hispanic	0.140	0.175	1.150	0.201	0.280	0.184	1.322	0.244
African American	0.033	0.178	1.033	0.184	0.084	0.184	1.087	0.200
Native American	0.183	0.421	1.201	0.505	0.322	0.435	1.380	0.601
SES	-0.086	0.077	0.918	0.070	-0.087	0.082	0.916	0.075
Female	-1.349 ***	0.101	0.260 ***	0.026	-1.278 ***	0.107	0.279 ***	0.030
School Enrollment	-0.013	0.025	0.987	0.025	-0.024	0.026	0.976	0.025
Private	0.290	0.205	1.336	0.274	0.340	0.213	1.405	0.299
Urban	-0.099	0.139	0.905	0.126	-0.081	0.141	0.923	0.130
Rural	-0.171	0.119	0.843	0.100	-0.124	0.125	0.883	0.110
Standardized Test Score 1990	-0.061 ***	0.006	0.941 ***	0.005	-0.054 ***	0.006	0.947 ***	0.006
Relocated? 1990	0.081	0.149	1.085	0.161	-0.021	0.153	0.979	0.150
Changed Schools? 1992	0.240	0.209	1.271	0.265	0.109	0.242	1.115	0.270
Currently Employed? 1990	0.075	0.103	1.078	0.111	0.107	0.106	1.113	0.118
Church Attendance 1990	-0.071 *	0.029	0.931 *	0.027	-0.083 **	0.031	0.920 **	0.029
Parental Involvement 1990	0.042	0.052	1.043	0.054	0.021	0.049	1.021	0.050
Community Involvement 1990	0.039 **	0.014	1.040 **	0.015	0.048 ***	0.014	1.050 ***	0.015
Self Concept 1992					0.165	0.091	1.179	0.107
Locus of Control 1992					-0.460 ***	0.103	0.631 ***	0.065
Constant	1.475	0.348			1.014	0.391		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 10350

N= 9702

Note: the weight f2flpnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.11: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Fighting at School (1992)**

	Model 1b				Model 2b			
<b>Fighting at School</b>	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Extracurricular Activity Score 1990	-0.020	0.043	0.980	0.043	-0.023	0.042	0.977	0.041
<b>Control Variables</b>								
Asian	-0.106	0.263	0.899	0.237	-0.003	0.276	0.997	0.275
Hispanic	0.124	0.176	1.132	0.199	0.262	0.185	1.300	0.240
African American	0.017	0.182	1.017	0.185	0.068	0.186	1.071	0.199
Native American	0.175	0.419	1.191	0.498	0.314	0.435	1.369	0.596
SES	-0.092	0.078	0.912	0.071	-0.094	0.083	0.910	0.076
Female	-1.346 ***	0.100	0.260 ***	0.026	-1.272 ***	0.105	0.280 ***	0.029
School Enrollment	-0.008	0.025	0.992	0.025	-0.019	0.026	0.981	0.026
Private	0.295	0.206	1.344	0.277	0.346	0.214	1.413	0.303
Urban	-0.090	0.140	0.914	0.128	-0.069	0.142	0.933	0.132
Rural	-0.169	0.120	0.844	0.101	-0.120	0.126	0.887	0.112
Standardized Test Score 1990	-0.062 ***	0.006	0.940 ***	0.005	-0.055 ***	0.006	0.947 ***	0.006
Relocated? 1990	0.075	0.150	1.078	0.162	-0.028	0.154	0.973	0.150
Changed Schools? 1992	0.242	0.211	1.274	0.269	0.113	0.245	1.119	0.275
Currently Employed? 1990	0.078	0.103	1.082	0.111	0.108	0.106	1.115	0.118
Church Attendance 1990	-0.073 *	0.030	0.930 *	0.028	-0.084 **	0.031	0.919 **	0.029
Parental Involvement 1990	0.034	0.051	1.034	0.053	0.013	0.049	1.013	0.049
Community Involvement 1990	0.034 *	0.014	1.035 *	0.015	0.044 **	0.015	1.045 **	0.015
Self Concept 1992					0.165	0.091	1.179	0.107
Locus of Control 1992					-0.467 ***	0.104	0.627 ***	0.065
Constant	1.323	0.345			0.860	0.388		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N=10350

N=9702

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988



**Table 5.12a: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Using Alcohol at School (1992)**

	Model 1a				Model 2a			
Alcohol at School	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Any Extracurricular Activity? 1990	-0.196	0.168	0.822	0.138	-0.177	0.171	0.838	0.143
<b>Control Variables</b>								
Asian	-0.496 *	0.244	0.609 *	0.149	-0.533 *	0.243	0.587 *	0.143
Hispanic	0.121	0.160	1.128	0.181	0.148	0.164	1.159	0.190
African American	-0.190	0.216	0.827	0.179	-0.212	0.229	0.809	0.185
Native American	-0.366	0.402	0.693	0.279	-0.349	0.412	0.705	0.291
SES	0.128	0.075	1.137	0.086	0.144	0.078	1.155	0.090
Female	-0.531 ***	0.098	0.588 ***	0.057	-0.449 ***	0.111	0.639 ***	0.071
School Enrollment	-0.065 *	0.026	0.937 *	0.024	-0.066 *	0.027	0.936 *	0.025
Private	0.119	0.184	1.126	0.208	0.117	0.188	1.125	0.211
Urban	-0.132	0.140	0.877	0.123	-0.162	0.143	0.850	0.121
Rural	-0.146	0.115	0.864	0.099	-0.129	0.116	0.879	0.102
Standardized Test Score 1990	-0.022 ***	0.006	0.978 ***	0.006	-0.017 **	0.006	0.983 **	0.006
Relocated? 1990	-0.200	0.141	0.819	0.116	-0.249	0.145	0.779	0.113
Changed Schools? 1992	-0.204	0.190	0.815	0.155	-0.179	0.207	0.836	0.173
Currently Employed? 1990	0.189	0.099	1.208	0.119	0.163	0.099	1.178	0.117
Church Attendance 1990	-0.140 ***	0.025	0.869 ***	0.022	-0.138 ***	0.026	0.871 ***	0.022
Parental Involvement 1990	-0.024	0.047	0.976	0.046	-0.029	0.048	0.972	0.047
Community Involvement 1990	0.034 **	0.012	1.035 **	0.013	0.035 **	0.013	1.036 **	0.013
Self Concept 1992					0.129	0.113	1.137	0.129
Locus of Control 1992					-0.470 ***	0.095	0.625 ***	0.059
Constant	0.102	0.319			-0.199	0.338		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N=9732

N=9334

Note: appropriate sample weights were used in all analyses

Source: National Educational Longitudinal Study of 1988

**Table 5.12b: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Using Marijuana at School (1992)**

	Model 1a				Model 2a			
Marijuana at School	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Any Extracurricular Activity? 1990	-0.504 *	0.203	0.604 *	0.123	-0.467 *	0.205	0.627 *	0.129
<b>Control Variables</b>								
Asian	-0.522 *	0.250	0.594 *	0.148	-0.602 *	0.253	0.548 *	0.138
Hispanic	0.011	0.210	1.011	0.213	-0.067	0.218	0.935	0.204
African American	-0.425	0.282	0.654	0.185	-0.477	0.300	0.621	0.186
Native American	0.147	0.438	1.158	0.508	0.158	0.445	1.171	0.521
SES	0.416 ***	0.104	1.515 ***	0.158	0.414 ***	0.108	1.513 ***	0.164
Female	-0.387 **	0.142	0.679 **	0.096	-0.308	0.167	0.735	0.123
School Enrollment	-0.009	0.036	0.991	0.035	0.001	0.036	1.001	0.036
Private	-0.058	0.252	0.943	0.237	-0.128	0.251	0.880	0.221
Urban	-0.199	0.185	0.820	0.152	-0.124	0.185	0.884	0.163
Rural	-0.544 ***	0.168	0.581 ***	0.098	-0.512 **	0.168	0.599 **	0.101
Standardized Test Score 1990	-0.039 ***	0.008	0.962 ***	0.008	-0.031 ***	0.008	0.969 ***	0.008
Relocated? 1990	-0.048	0.183	0.953	0.174	-0.059	0.187	0.943	0.176
Changed Schools? 1992	0.377	0.225	1.458	0.328	0.380	0.230	1.463	0.336
Currently Employed? 1990	0.300 *	0.136	1.349 *	0.183	0.337 *	0.135	1.400 *	0.190
Church Attendance 1990	-0.168 ***	0.035	0.845 ***	0.029	-0.167 ***	0.035	0.846 ***	0.030
Parental Involvement 1990	-0.177 **	0.067	0.838 **	0.056	-0.155 *	0.067	0.856 *	0.057
Community Involvement 1990	-0.001	0.017	0.999	0.017	-0.001	0.018	0.999	0.018
Self Concept 1992					0.175	0.174	1.191	0.207
Locus of Control 1992					-0.590 ***	0.135	0.554 ***	0.075
Constant	0.594	0.440			0.054	0.458		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 9331

N= 9238

Note: the weight f2flpnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.12c: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Using Cocaine at School (1992)**

	Model 1a				Model 2a			
Cocaine at School	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Any Extracurricular Activity? 1990	-0.784 *	0.316	0.456 *	0.144	-0.722 *	0.335	0.486 *	0.163
<b>Control Variables</b>								
Asian	-0.382	0.569	0.683	0.388	-0.424	0.574	0.654	0.375
Hispanic	1.091 *	0.435	2.977 *	1.294	1.146 **	0.448	3.147 **	1.409
African American	0.090	0.456	1.094	0.499	0.238	0.472	1.269	0.599
Native American	0.600	0.929	1.822	1.693	0.647	0.917	1.910	1.752
SES	-0.203	0.213	0.817	0.174	-0.249	0.207	0.780	0.162
Female	-0.956 **	0.302	0.384 **	0.116	-0.971 **	0.323	0.379 **	0.122
School Enrollment	-0.130	0.072	0.878	0.063	-0.123	0.076	0.884	0.067
Private	-0.572	0.693	0.564	0.391	-0.642	0.709	0.526	0.373
Urban	-0.685	0.456	0.504	0.230	-0.542	0.468	0.582	0.272
Rural	-0.401	0.365	0.670	0.244	-0.313	0.387	0.731	0.283
Standardized Test Score 1990	-0.057 ***	0.015	0.945 ***	0.015	-0.037 *	0.015	0.964 *	0.015
Relocated? 1990	-0.541	0.448	0.582	0.261	-0.464	0.448	0.629	0.282
Changed Schools? 1992	-0.747	0.633	0.474	0.300	-0.689	0.633	0.502	0.318
Currently Employed? 1990	1.005 ***	0.260	2.731 ***	0.711	1.082 ***	0.268	2.949 ***	0.790
Church Attendance 1990	-0.179 *	0.077	0.836 *	0.065	-0.159	0.082	0.853	0.070
Parental Involvement 1990	-0.054	0.149	0.947	0.141	-0.011	0.146	0.989	0.145
Community Involvement 1990	0.018	0.040	1.019	0.041	0.028	0.039	1.028	0.040
Self Concept 1992					-0.225	0.241	0.799	0.192
Locus of Control 1992					-0.692 *	0.280	0.501 *	0.140
Constant	-0.247	0.828			-1.698	0.892		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 9318

N= 9227

Note: appropriate sample weights were used in all analyses

Source: National Educational Longitudinal Study of 1988

**Table 5.13a: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Using Alcohol at School (1992)**

	Model 1b				Model 2b			
Alcohol at School	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Extracurricular Activity Score 1990	-0.040	0.043	0.961	0.041	-0.046	0.041	0.955	0.039
<b>Control Variables</b>								
Asian	-0.481	0.243	0.618	0.150	-0.514 *	0.241	0.598 *	0.144
Hispanic	0.117	0.160	1.124	0.180	0.145	0.164	1.156	0.189
African American	-0.191	0.217	0.826	0.180	-0.209	0.230	0.811	0.186
Native American	-0.360	0.402	0.698	0.281	-0.342	0.412	0.710	0.293
SES	0.126	0.076	1.134	0.086	0.144	0.078	1.155	0.090
Female	-0.521 ***	0.102	0.594 ***	0.061	-0.435 ***	0.116	0.647 ***	0.075
School Enrollment	-0.065 *	0.026	0.937 *	0.024	-0.066 *	0.027	0.936 *	0.025
Private	0.118	0.184	1.125	0.208	0.115	0.188	1.122	0.211
Urban	-0.126	0.140	0.882	0.124	-0.157	0.142	0.855	0.122
Rural	-0.142	0.115	0.867	0.100	-0.123	0.116	0.884	0.102
Standardized Test Score 1990	-0.022 ***	0.006	0.978 ***	0.006	-0.016 **	0.006	0.984 **	0.006
Relocated? 1990	-0.204	0.142	0.815	0.116	-0.255	0.146	0.775	0.113
Changed Schools? 1992	-0.201	0.191	0.818	0.156	-0.177	0.208	0.838	0.175
Currently Employed? 1990	0.190	0.099	1.210	0.120	0.164	0.100	1.179	0.117
Church Attendance 1990	-0.141 ***	0.025	0.869 ***	0.022	-0.138 ***	0.026	0.871 ***	0.022
Parental Involvement 1990	-0.023	0.047	0.978	0.046	-0.026	0.049	0.975	0.047
Community Involvement 1990	0.035 **	0.013	1.035 **	0.013	0.036 **	0.013	1.037 **	0.014
Self Concept 1992					0.128	0.114	1.136	0.130
Locus of Control 1992					-0.469 ***	0.095	0.626 ***	0.060
Constant	-0.001	0.314			-0.297	0.333		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 9732

N= 9334

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.13b: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Using Marijuana at School (1992)**

	Model 1b				Model 2b			
<b>Marijuana at School</b>	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Extracurricular Activity Score 1990	-0.223 ***	0.062	0.800 ***	0.050	-0.209 ***	0.062	0.811 ***	0.050
<b>Control Variables</b>								
Asian	-0.448	0.248	0.639	0.159	-0.529 *	0.251	0.589 *	0.148
Hispanic	0.009	0.210	1.009	0.212	-0.065	0.218	0.937	0.204
African American	-0.413	0.287	0.662	0.190	-0.459	0.304	0.632	0.192
Native American	0.175	0.437	1.191	0.520	0.184	0.444	1.202	0.534
SES	0.419 ***	0.105	1.520 ***	0.160	0.416 ***	0.110	1.516 ***	0.166
Female	-0.334 *	0.147	0.716 *	0.106	-0.257	0.174	0.773	0.135
School Enrollment	-0.015	0.036	0.985	0.035	-0.004	0.036	0.996	0.036
Private	-0.079	0.252	0.924	0.233	-0.146	0.251	0.865	0.217
Urban	-0.184	0.186	0.832	0.155	-0.108	0.185	0.898	0.166
Rural	-0.520 **	0.167	0.594 **	0.099	-0.488 **	0.167	0.614 **	0.103
Standardized Test Score 1990	-0.036 ***	0.008	0.965 ***	0.008	-0.029 ***	0.008	0.972 ***	0.008
Relocated? 1990	-0.070	0.186	0.933	0.174	-0.081	0.191	0.923	0.176
Changed Schools? 1992	0.377	0.226	1.458	0.330	0.381	0.231	1.464	0.338
Currently Employed? 1990	0.310 *	0.135	1.364 *	0.185	0.344 *	0.135	1.410 *	0.191
Church Attendance 1990	-0.170 ***	0.035	0.843 ***	0.029	-0.169 ***	0.035	0.845 ***	0.030
Parental Involvement 1990	-0.154 *	0.067	0.857 *	0.057	-0.134 *	0.067	0.875 *	0.059
Community Involvement 1990	0.009	0.018	1.009	0.018	0.009	0.019	1.009	0.019
Self Concept 1992					0.172	0.177	1.187	0.210
Locus of Control 1992					-0.578 ***	0.137	0.561 ***	0.077
Constant	0.327	0.433			-0.195	0.447		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 9331

N= 9238

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.13c: Logistic/Logit Regression Results for the Effects of Extracurricular Activity Participation (1990) on Using Cocaine at School (1992)**

	Model 1b				Model 2b			
Cocaine at School	$\beta$	s.e.	Odds ratio	s.e.	$\beta$	s.e.	Odds ratio	s.e.
<b>Independent Variables</b>								
Extracurricular Activity Score 1990	-0.146	0.135	0.865	0.117	-0.135	0.138	0.874	0.121
<b>Control Variables</b>								
Asian	-0.364	0.567	0.695	0.394	-0.402	0.571	0.669	0.382
Hispanic	1.034 *	0.430	2.813 *	1.209	1.102 *	0.441	3.011 *	1.328
African American	0.103	0.459	1.108	0.508	0.259	0.476	1.295	0.617
Native American	0.631	0.955	1.879	1.795	0.675	0.951	1.964	1.869
SES	-0.209	0.215	0.811	0.174	-0.258	0.209	0.772	0.161
Female	-0.932 **	0.307	0.394 **	0.121	-0.951 **	0.326	0.386 **	0.126
School Enrollment	-0.114	0.075	0.892	0.067	-0.112	0.079	0.894	0.071
Private	-0.561	0.690	0.571	0.394	-0.638	0.706	0.528	0.373
Urban	-0.667	0.462	0.513	0.237	-0.520	0.472	0.595	0.281
Rural	-0.386	0.370	0.680	0.251	-0.315	0.393	0.730	0.287
Standardized Test Score 1990	-0.059 ***	0.016	0.942 ***	0.015	-0.039 *	0.016	0.962 *	0.015
Relocated? 1990	-0.560	0.446	0.571	0.255	-0.491	0.446	0.612	0.273
Changed Schools? 1992	-0.719	0.623	0.487	0.304	-0.677	0.625	0.508	0.318
Currently Employed? 1990	0.996 ***	0.261	2.708 ***	0.706	1.077 ***	0.268	2.936 ***	0.786
Church Attendance 1990	-0.183 *	0.078	0.833 *	0.065	-0.160	0.082	0.852	0.070
Parental Involvement 1990	-0.066	0.144	0.936	0.135	-0.018	0.141	0.982	0.139
Community Involvement 1990	0.013	0.042	1.013	0.042	0.022	0.042	1.022	0.042
Self Concept 1992					-0.223	0.240	0.800	0.192
Locus of Control 1992					-0.696 *	0.283	0.499 *	0.141
Constant	-0.504	0.866			-1.918	0.907		

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 9318

N= 9227

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

## Participation in Different Domains

I expected that some types of extracurricular activities matter more in terms of positively anchoring students to the social environment and in provisions of efficacy, perceptions of control, and positive self-concept. This approach examined variations in the type of extracurricular activity in which students participate and the delinquency, self-concept, and locus of control of the students involved.

Table 5.14 presents the OLS regression analysis of light delinquency with participation in various extracurricular activity domains as the independent variables. Participation in the performance arts had the strongest relationship with decreased involvement in light school delinquency, with a significance level of  $p < .001$ . The coefficient for participation in performing arts indicates a .350 reduction in the light delinquency score for students who participated in the performing arts. Participation in varsity sports and hobbies/interest groups were each associated with decreased involvement in light school delinquency (both were significant at the  $p < .05$  level), although the participation variables ( $\beta = -.204$ ,  $\beta = -.218$ ) were not as strong as for the performing arts. The coefficient for participation in student government indicates a .283 unit *increase* in light delinquency score for students who were participants (significant at the  $p < .05$  level).

Table 5.15 presents the results for the logistic regression analysis of severe delinquency with participation in various extracurricular activity domains as the independent variables. As expected, none of the extracurricular activity groups was significantly related to severe delinquency.

Table 5.16 presents the results for the logistic regression analysis of fighting at school with participation in various extracurricular activity domains as the independent variables. None of the activity groups was significantly associated with fighting at school.

**Table 5.14: OLS Regression Results for the Effects of Extracurricular Activity Participation on Light School Delinquency**

	<b>Model 1c</b>	
<b>Light Delinquency</b>	<b><math>\beta</math></b>	<b>s.e.</b>
<b>Independent Variables</b>		
Varsity Sport	-0.204 *	0.094
Intramural Sport	0.084	0.127
Varsity Cheerleading	-0.098	0.215
Intramural Cheerleading	0.371	0.447
Hobbies, Interest	-0.218 *	0.094
Performance Arts	-0.350 ***	0.098
Student Government	0.283 *	0.131
Newspaper, Yearbook	0.029	0.136
<b>Control Variables</b>		
Asian	0.000	0.209
Hispanic	0.396 *	0.177
African American	-0.673 ***	0.191
Native American	0.068	0.467
SES	0.169 *	0.066
Female	-0.337 ***	0.101
School Enrollment	0.083 ***	0.025
Private	0.258	0.182
Urban	-0.109	0.138
Rural	-0.491 ***	0.104
Standardized Test Score	-0.052 ***	0.006
Relocated? 1990	0.189	0.142
Changed Schools? 1992	0.459	0.253
Currently Employed? 1990	0.540 ***	0.100
Church Attendance 1990	-0.235 ***	0.028
Parental Involvement 1990	-0.185 ***	0.042
Community Involvement 1990	0.069 ***	0.014
Constant	8.124	0.347
R <sup>2</sup>	0.074	

\* p<.05

N=10331

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988



**Table 5.15: Logistic Regression Results for the Effects of Extracurricular Activity Participation on Severe Delinquency**

	<b>Model 1c</b>	
<b>Severe Delinquency</b>	<b>Odds Ratio</b>	<b>s.e.</b>
<b>Independent Variables</b>		
Varsity Sport	1.226	0.223
Intramural Sport	0.947	0.203
Varsity Cheerleading	0.859	0.325
Intramural Cheerleading	0.353	0.253
Hobbies, Interest	1.090	0.195
Performance Arts	0.879	0.199
Student Government	0.528	0.202
Newspaper, Yearbook	1.191	0.360
<b>Control Variables</b>		
Asian	0.374 *	0.157
Hispanic	0.397 ***	0.112
African American	0.619	0.183
Native American	0.721	0.462
SES	1.087	0.145
Female	0.262 ***	0.053
School Enrollment	1.078	0.043
Private	1.050	0.307
Urban	0.994	0.236
Rural	0.809	0.157
Standardized Test Score	0.927 ***	0.009
Relocated? 1990	1.320	0.327
Changed Schools? 1992	1.529	0.355
Currently Employed? 1990	1.519 *	0.263
Church Attendance 1990	0.841 ***	0.043
Parental Involvement 1990	1.070	0.080
Community Involvement 1990	1.023	0.026

\* p<.05

\*\* p < .01

\*\*\*p<.001

N=10433

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.16: Logistic Regression Results for the Effects of Extracurricular Activity Participation on Fighting at School**

	<b>Model 1c</b>	
<b>Fighting at School</b>	<b>Odds Ratio</b>	<b>s.e.</b>
<b>Independent Variables</b>		
Varsity Sport	0.884	0.092
Intramural Sport	1.079	0.156
Varsity Cheerleading	0.821	0.223
Intramural Cheerleading	0.949	0.424
Hobbies, Interest	0.941	0.100
Performance Arts	1.030	0.118
Student Government	0.885	0.181
Newspaper, Yearbook	0.985	0.158
<b>Control Variables</b>		
Asian	0.879	0.229
Hispanic	1.127	0.198
African American	1.003	0.175
Native American	1.191	0.507
SES	0.915	0.070
Female	0.259 ***	0.028
School Enrollment	0.987	0.024
Private	1.321	0.272
Urban	0.908	0.125
Rural	0.832	0.098
Standardized Test Score	0.939 ***	0.005
Relocated? 1990	1.075	0.158
Changed Schools? 1992	1.275	0.256
Currently Employed? 1990	1.083	0.111
Church Attendance 1990	0.929 *	0.028
Parental Involvement 1990	1.044	0.054
Community Involvement 1990	1.039	0.015

\* p<.05

N=10441

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

Table 5.17a, b, and c presents the findings for the logistic regression analysis of “under the influence at school” with participation in various extracurricular activity domains as the independent variables. Participation in the performing arts was associated with a decrease in alcohol use at school ( $p < .01$  level); all other activity groups were not significantly related to alcohol use at school. Participation in varsity sports was associated with a decrease in marijuana use at school ( $p < .05$  level), while participation in the performing arts bore a stronger association with decreased marijuana use at school ( $p < .001$  level). None of the activity groups was associated with cocaine use.

### **Summary of Findings for Models 1 and 2**

Students who participated in extracurricular activities during their sophomore year were less likely to be involved in light delinquency, less likely to get into fights at school, and less likely to use marijuana and cocaine at school during their senior year than students who did not participate.

Participation in extracurricular activities during the sophomore year was found to have no effect on severe delinquency during the senior year. While these results may appear discouraging, this could be the result of the age of the students in the survey. By their sophomore year in high school, most students are already well on their way down a path of general conformity or severe delinquency; for the majority of students, extracurricular activity participation during their sophomore year would have no effect on the previous fifteen years of socialization. Examination of the participation-severe delinquency relationship would prove more useful among younger students, or over a more extended longitudinal study.

Only 3.45% of students committed any type of severe delinquency. This small group warrants a more focused examination that lies outside the scope of this study.

Locus of control continually emerged as a significant predictor for all of the dependent variables in this section. I found it odd that self-concept was non-significant for the dependent variables, since this was not consistent with the literature. As an exploratory measure, I ran the models without including senior year locus of control and adding senior year self concept. A more positive senior year self-concept was related to decreased light delinquency ( $p < .001$ ), decreased log odds of severe delinquency ( $p < .001$ ), and decreased log odds of using cocaine at school ( $p < .05$ ). While my results disguise the significance of self-concept, an important comparison emerges; when locus of control is entered into the model, the significance of self-concept disappears. Locus of control is thus more important in our considerations of delinquency among adolescents than self-concept, and the self-concept is more dependent on locus of control than vice versa. The correlation between 1990 self-concept and locus of control was .5813; for 1992, .5730.

## **SOCIAL INTEGRATION AND THE SELF**

In the previous section, I found that locus of control had a significant effect of delinquency, and helped explain some of the effect of participation on delinquency. This section will present the findings for Model 3, which takes a closer look at the relationship between participation in extracurricular activities during sophomore year and locus of control and self-concept as measured during senior year. To ensure against selection effects, I include controls for locus of control and self-concept from sophomore year.

### **Locus of Control**

Table 5.18 presents the results for the OLS regression analysis of senior year locus of control with participation in *any* extracurricular activity as the independent variable.

Participation in any extracurricular activity during the sophomore year was associated with a

**Table 5.17: Logistic Regression Results for the Effects of Extracurricular Activity Participation on Under the Influence of at School**

	Alcohol at School		Marijuana at School		Cocaine at School	
	O.R.	s.e.	O.R.	s.e.	O.R.	s.e.
<b>Independent Variables</b>						
Varsity Sport	1.174	0.117	0.752 *	0.103	0.576	0.163
Intramural Sport	1.014	0.134	0.912	0.171	0.837	0.331
Varsity Cheerleading	0.916	0.157	0.682	0.164	1.816	1.122
Intramural Cheerleading	0.690	0.302	0.348	0.200		
Hobbies, Interest	0.865	0.085	0.817	0.115	0.724	0.212
Performance Arts	0.734 **	0.085	0.568 ***	0.087	0.945	0.317
Student Government	1.305	0.200	0.873	0.203	0.700	0.430
Newspaper, Yearbook	0.801	0.115	1.024	0.191	1.868	0.896
<b>Control Variables</b>						
Asian	0.639	0.151	0.655	0.159	0.731	0.415
Hispanic	1.111	0.177	1.006	0.212	2.934 *	1.274
African American	0.824	0.181	0.675	0.190	1.053	0.495
Native American	0.696	0.281	1.176	0.519	1.929	1.834
SES	1.132	0.086	1.530 ***	0.161	0.826	0.178
Female	0.648 ***	0.068	0.725 *	0.108	0.327 **	0.120
School Enrollment	0.940 *	0.025	0.983	0.035	0.891	0.067
Private	1.063	0.198	0.872	0.222	0.600	0.414
Urban	0.904	0.126	0.839	0.153	0.497	0.231
Rural	0.884	0.102	0.584 ***	0.098	0.663	0.245
Standardized Test Score	0.979 ***	0.006	0.963 ***	0.008	0.942 ***	0.015
Relocated? 1990	0.810	0.116	0.927	0.171	0.576	0.258
Changed Schools? 1992	0.815	0.156	1.468	0.328	0.482	0.307
Currently Employed? 1990	1.233 *	0.122	1.356 *	0.183	2.626 ***	0.695
Church Attendance 1990	0.872 ***	0.022	0.845 ***	0.029	0.832 *	0.064
Parental Involvement 1990	0.978	0.048	0.865 *	0.057	0.927	0.137
Community Involvement 1990	1.030	0.014	1.007	0.019	1.021	0.042

\* p<.05

\*\* p < .01

\*\*\*p<.001

N=9818

N=9413

N=9293

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

more internalized locus of control (greater feelings of empowerment) for the senior year (.063 unit increase in the locus of control variable); this relationship was significant at the  $p < .05$  level, even after including measures for self-concept and locus of control sophomore year (Model 3b). The inclusion of these two variables increased the  $R^2$  from .0891 to .2599.

Table 5.19 presents the results for the OLS regression analysis of senior year locus of control with total number of activities as the independent variable. The participation score was significantly related to a more internalized locus of control at the  $p < .001$  level; when measures for self-concept and locus of control during the sophomore year were introduced (Model 3b), participation remained significant, but at the  $p < .01$  level. The coefficient for the participation score in Model 3 indicates a .020 increase in the locus of control variable for each activity students participate in; in Model 3b, the coefficient decreases slightly to .015, due to the inclusion of indicators for self-concept and locus of control sophomore year. The inclusion of these variables increased the  $R^2$  from .0895 to .2601.

Table 5.20 presents the results of the OLS regression analysis of locus of control for the senior year with participation in various extracurricular activity domains as the independent variables. Participation in varsity sports during the sophomore year was significantly associated with a more internalized locus of control during the senior year ( $p < .001$ ); after introducing indicators for self-concept and sophomore year locus of control, this relationship remained significant, but at the  $p < .01$  level. Participation in student government was also significantly associated with a more internalized locus of control in the senior year at the  $p < .001$  level; this significance remained even after including indicators for self-concept and locus of control in the sophomore year.

### Summary of Findings for Locus of Control, Model 3

The participation score was a better predictor of senior year locus of control ( $p < .001$ ) than participation as a “0-1” measure ( $p < .05$ ). The more extracurricular activities students participate in, the greater their feelings of empowerment and perceptions of control, *even when accounting for self-concept and locus of control sophomore year*.

Students who participate in varsity sports and student government express a greater sense of personal control than non-participants, even after accounting for self-concept and locus of control sophomore year; it is clear that these particular extracurricular activities provide students with more positive visibility and “publicity” (Holland and Andre, 1987), thus increasing the participants’ sense of empowerment within the school environment.

### Self-Concept

Tables 5.21 and 5.22 present the findings for the OLS regression analysis for self-concept. Neither measure of participation was found to have a significant effect on self-concept during the senior year. Without including indicators for self-concept and locus of control for the sophomore year, the  $R^2$  was .069 for both measures of participation; after introducing these variables, the  $R^2$  jumped to .328 for both measures of participation, with both the indicators for self-concept and locus of control for the sophomore year significant at the  $p < .001$  level.

Table 5.23 presents the results of the OLS regression analysis of self-concept in the senior year with participation in various extracurricular activity domains as the independent variables. Participation in varsity sports during the sophomore year was found to be significantly associated with a more positive self-concept in the senior year ( $p < .01$  level). Specifically, participation in varsity sports was associated with a .061 unit increase in the self-concept variable. However, the significance disappeared with the inclusion of indicators for self-concept

and locus of control for the sophomore year; thus, it is past locus of control and self-concept, and not varsity sport participation, that matters most in terms of self-concept during the sophomore year. Participation in intramural sports was significantly associated with a *more negative* self-concept in the senior year ( $p < .01$ ). Specifically, participation in intramural sports during the sophomore year was associated with a .072 unit *decrease* in the self-concept variable. The significance actually *increased* with the inclusion of indicators for self-concept and locus of control sophomore year. This implies that students who participated in intramural sports during their sophomore year were *more likely* to report negative self-concept for their senior year.

### **Summary of Findings for Self-Concept, Model 3**

According to my findings, the best predictor of senior year self-concept, even after considering all other factors included in the model, is the self-concept from the sophomore year. For high school students, the self-concept appears to be stable over time, and is unaffected by participation in extracurricular activities. The analysis of the effect of participation in different extracurricular activities on self-concept revealed that most activities had no effect on the senior year self-concept. While varsity sport participation was associated with a more positive self-concept during the senior year, this effect disappeared with the inclusion of indicators for self-concept and locus of control from the sophomore year. Intramural sport participation was associated with a more negative self-concept senior year, even after including indicators for self-concept and locus of control from the sophomore year. This negative relationship is reflective of the pervasive high school culture that values varsity athletics and *devalues* other forms of sport participation.



## DELINQUENCY AND THE SELF

This section of analyses tests the theory of social integration as a buffer between negative self-concept, externalized locus of control, and delinquency. To examine the “buffering hypothesis”, outlined in Model 4, I took a sub-sample of students, selecting only those who fell within the lowest quartile for self-concept ( $<-.45$ ) and locus of control ( $<-.35$ ) during sophomore year (the lowest quartile for locus of control equates to a greater sense of powerlessness, feelings of external control). This approach examines the effect of *any participation* on senior year delinquency, self-concept, and locus of control for students who reported low self-concept and a more externalized locus of control during their sophomore year.

### Light Delinquency

Table 5.24 presents the findings for the OLS regression of the light delinquency score with participation in extracurricular activities as the independent variable; the population for this analysis is students who fell within the lowest quartile for sophomore year self-concept. Participation in extracurricular activities was associated with a lower light delinquency score for the senior year. The coefficient of the participation variable is *significantly stronger* for students who reported lower sophomore year self-concept ( $\beta = -.955$ ) than for the larger sample ( $\beta = -.519$ ). This suggests that participation has a stronger effect on light delinquency for students who exhibit low self-concept than for the general student body.

Participation in extracurricular activities was not related to light delinquency among students who reported a more externalized locus of control for their sophomore year.

**Table 5.18: OLS Regression Results for the Effects of Extracurricular Activity Participation (1990) on Locus of Control (1992)**

	<b>Model 3a</b>		<b>Model 3a</b>	
<b>Locus of Control 1992</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Any Extracurricular Activity? 1990	0.063 *	0.025	0.048 *	0.024
<b>Control Variables</b>				
Asian	-0.123 ***	0.032	-0.093 ***	0.026
Hispanic	0.065	0.036	0.040	0.031
African American	0.068 *	0.034	-0.019	0.035
Native American	0.127	0.078	0.074	0.082
SES	-0.013	0.016	-0.010	0.016
Female	0.104 ***	0.017	0.124 ***	0.017
School Enrollment	0.004	0.005	0.003	0.004
Private	0.004	0.038	0.000	0.032
Urban	0.056 *	0.024	0.039	0.022
Rural	0.016	0.021	0.026	0.019
Standardized Test Score	0.015 ***	0.001	0.009 ***	0.001
Relocated? 1990	-0.032	0.032	-0.009	0.030
Changed Schools? 1992	-0.014	0.039	0.008	0.035
Currently Employed? 1990	0.032	0.019	0.045 **	0.017
Church Attendance 1990	0.018 ***	0.005	0.013 **	0.005
Parental Involvement 1990	0.031 ***	0.008	0.012	0.008
Community Involvement 1990	0.009 ***	0.003	0.002	0.002
Locus of Control 1990			0.312 ***	0.024
Self Concept 1990			0.154 ***	0.018
Constant	-1.016	0.079	-0.596	0.079
R <sup>2</sup>	0.089		0.2599	

\* p<.05

N= 9722

N= 9722

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.19: OLS Regression Results for the Effects of Extracurricular Activity Participation (1990) on Locus of Control (1992)**

	<b>Model 3b</b>		<b>Model 3b</b>	
<b>Locus of Control 1992</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Extracurricular Activity Score 1990	0.020 ***	0.006	0.015 **	0.006
<b>Control Variables</b>				
Asian	-0.131 ***	0.032	-0.099 ***	0.026
Hispanic	0.065	0.037	0.039	0.031
African American	0.066	0.034	-0.021	0.035
Native American	0.125	0.077	0.072	0.080
SES	-0.014	0.016	-0.010	0.016
Female	0.098 ***	0.017	0.120 ***	0.017
School Enrollment	0.004	0.005	0.004	0.004
Private	0.006	0.038	0.001	0.032
Urban	0.054 *	0.025	0.038	0.022
Rural	0.013	0.021	0.024	0.019
Standardized Test Score 1990	0.015 ***	0.001	0.009 ***	0.001
Relocated? 1990	-0.030	0.032	-0.008	0.030
Changed Schools? 1992	-0.014	0.039	0.008	0.035
Currently Employed? 1990	0.031	0.019	0.044 **	0.017
Church Attendance 1990	0.018 ***	0.005	0.013 **	0.005
Parental Involvement 1990	0.029 ***	0.008	0.010	0.007
Community Involvement 1990	0.008 **	0.003	0.001	0.003
Locus of Control 1990			0.312 ***	0.024
Self Concept 1990			0.154 ***	0.018
Constant	-0.976	0.078	-0.567	0.078
R <sup>2</sup>	0.090		0.260	

\* p<.05

\*\* p < .01

\*\*\*p<.001

N=9863

N=9857

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.20: Regression Results for the Effects of Extracurricular Activity Participation on Locus of Control (1992)**

	<b>Model 3c</b>		<b>Model 3c</b>	
<b>Locus of Control 1992</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Varsity Sport	0.065 ***	0.018	0.041 **	0.016
Intramural Sport	-0.035	0.025	-0.034	0.023
Varsity Cheerleading	0.036	0.030	0.035	0.024
Intramural Cheerleading	0.091	0.104	0.196	0.156
Hobbies, Interest	0.032	0.018	0.017	0.016
Performance Arts	0.007	0.019	0.026	0.017
Student Government	0.100 ***	0.027	0.076 ***	0.022
Newspaper, Yearbook	-0.029	0.024	-0.030	0.022
<b>Control Variables</b>				
Asian	-0.126 ***	0.032	-0.096 ***	0.026
Hispanic	0.060	0.036	0.036	0.030
African American	0.062 *	0.031	-0.031	0.031
Native American	0.129	0.076	0.077	0.083
SES	-0.018	0.016	-0.013	0.016
Female	0.100 ***	0.018	0.115 ***	0.017
School Enrollment	0.006	0.005	0.005	0.004
Private	0.014	0.038	0.011	0.032
Urban	0.060 *	0.024	0.040	0.021
Rural	0.018	0.021	0.025	0.018
Standardized Test Score	0.015 ***	0.001	0.009 ***	0.001
Relocated? 1990	-0.029	0.031	-0.008	0.029
Changed Schools? 1992	-0.011	0.037	0.012	0.034
Currently Employed? 1990	0.035	0.019	0.047 **	0.016
Church Attendance 1990	0.020 ***	0.005	0.013 **	0.005
Parental Involvement 1990	0.028 ***	0.008	0.008	0.007
Community Involvement 1990	0.008 **	0.003	0.002	0.002
Self-Concept 1990			0.153 ***	0.017
Locus of Control 1990			0.314 ***	0.021
Constant	-1.002	0.077	-0.588	0.078
R <sup>2</sup>	0.095		0.265	

\* p<.05

N=9815

N=9809

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.21: OLS Regression Results for the Effects of Extracurricular Activity Participation (1990) on Self-Concept (1992)**

	<b>Model 3a</b>		<b>Model 3a</b>	
<b>Self-Concept 1992</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Any Extracurricular Activity? 1990	0.013	0.034	-0.018	0.023
<b>Control Variables</b>				
Asian	-0.081	0.048	-0.061	0.039
Hispanic	0.152 ***	0.038	0.111 ***	0.029
African American	0.309 ***	0.042	0.100 **	0.035
Native American	0.067	0.141	-0.017	0.104
SES	0.001	0.017	0.013	0.013
Female	-0.166 ***	0.021	-0.068 ***	0.017
School Enrollment	0.004	0.006	0.002	0.004
Private	-0.010	0.050	-0.019	0.036
Urban	0.024	0.031	-0.011	0.024
Rural	-0.019	0.025	-0.007	0.019
Standardized Test Score 1990	0.012 ***	0.001	0.005 ***	0.001
Relocated? 1990	-0.015	0.034	0.014	0.027
Changed Schools? 1992	-0.027	0.054	0.012	0.040
Currently Employed? 1990	0.002	0.023	0.019	0.018
Church Attendance 1990	0.008	0.006	0.005	0.005
Parental Involvement 1990	0.030 **	0.010	0.006	0.008
Community Involvement 1990	0.015 ***	0.003	0.004	0.002
Locus of Control 1990			0.075 ***	0.018
Self Concept 1990			0.504 ***	0.017
Constant	-0.736	0.082	-0.262	0.067
R <sup>2</sup>	0.069		0.328	

\* p<.05

N=9739

N=9725

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.22: OLS Regression Results for the Effects of Extracurricular Activity Participation (1990) on Self-Concept (1992)**

	<b>Model 3a</b>		<b>Model 3b</b>	
<b>Self Concept 1992</b>	<b><math>\beta</math></b>	<b>s.e.</b>	<b><math>\beta</math></b>	<b>s.e.</b>
<b>Independent Variables</b>				
Extracurricular Activity Score 1990	0.002	0.008	-0.005	0.006
<b>Control Variables</b>				
Asian	-0.082	0.048	-0.058	0.039
Hispanic	0.153 ***	0.038	0.111 ***	0.029
African American	0.309 ***	0.043	0.100 **	0.035
Native American	0.067	0.141	-0.016	0.104
SES	0.002	0.017	0.013	0.014
Female	-0.166 ***	0.021	-0.066 ***	0.017
School Enrollment	0.004	0.006	0.002	0.005
Private	-0.010	0.050	-0.020	0.036
Urban	0.024	0.031	-0.010	0.024
Rural	-0.019	0.025	-0.006	0.019
Standardized Test Score 1990	0.012 ***	0.001	0.005 ***	0.001
Relocated? 1990	-0.015	0.034	0.013	0.027
Changed Schools? 1992	-0.028	0.054	0.012	0.040
Currently Employed? 1990	0.002	0.023	0.019	0.018
Church Attendance 1990	0.008	0.006	0.005	0.005
Parental Involvement 1990	0.030 **	0.010	0.007	0.008
Community Involvement 1990	0.015 ***	0.003	0.004	0.002
Locus of Control 1990			0.076 ***	0.018
Self Concept 1990			0.504 ***	0.016
Constant	-0.729	0.080	-0.273	0.067
R <sup>2</sup>	0.069		0.328	

\* p<.05

N=9730

N=9725

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.23: Regression Results for the Effects of Analysis of Extracurricular Activity Participation on Self Concept (1992)**

	<b>Model 3c</b>		<b>Model 3c</b>	
<b>Self-Concept 1992</b>	<b>β</b>	<b>s.e.</b>	<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>				
Varsity Sport	0.061 **	0.021	0.030	0.017
Intramural Sport	-0.072 **	0.026	-0.073 ***	0.022
Varsity Cheerleading	0.047	0.044	0.038	0.030
Intramural Cheerleading	-0.018	0.060	0.025	0.058
Hobbies, Interest	0.024	0.020	0.004	0.016
Performance Arts	-0.031	0.023	0.004	0.019
Student Government	0.052	0.031	0.021	0.025
Newspaper, Yearbook	-0.035	0.032	-0.052	0.028
<b>Control Variables</b>				
Asian	-0.074	0.047	-0.053	0.038
Hispanic	0.149 ***	0.038	0.109 ***	0.029
African American	0.314 ***	0.040	0.103 **	0.034
Native American	0.070	0.140	-0.011	0.104
SES	-0.004	0.017	0.009	0.014
Female	-0.163 ***	0.022	-0.071 ***	0.018
School Enrollment	0.006	0.006	0.003	0.004
Private	0.000	0.049	-0.006	0.035
Urban	0.031	0.030	-0.007	0.023
Rural	-0.016	0.025	-0.008	0.019
Standardized Test Score	0.012 ***	0.001	0.004 ***	0.001
Relocated? 1990	-0.012	0.034	0.014	0.027
Changed Schools? 1992	-0.026	0.050	0.016	0.038
Currently Employed? 1990	0.005	0.023	0.020	0.018
Church Attendance 1990	0.009	0.006	0.005	0.005
Parental Involvement 1990	0.029 **	0.010	0.004	0.008
Community Involvement 1990	0.013 ***	0.003	0.004	0.002
Self-Concept 1990			0.500 ***	0.016
Locus of Control 1990			0.076 ***	0.018
Constant	-0.747	0.079	-0.282	0.067
R <sup>2</sup>	0.074		0.329	

\* p<.05

N=9817

N=9813

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.24: OLS Regression Results for the Effects of Extracurricular Activity Participation on Light Delinquency for Students with Low Self-Concept (sophomore year)**

	<b>Model 4</b>	
<b>Light Delinquency Score</b>	<b><math>\beta</math></b>	<b>s.e.</b>
<b>Independent Variables</b>		
Any Extracurricular Activity? 1990	-0.955 ***	0.293
<b>Control Variables</b>		
Asian	-0.622	0.450
Hispanic	0.475	0.376
African American	-0.200	0.387
Native American	-1.719	1.043
SES	0.160	0.153
Female	-0.433 *	0.220
School Enrollment	0.106	0.055
Private	0.193	0.401
Urban	-0.307	0.288
Rural	-0.317	0.274
Standardized Test Score 1990	-0.033 *	0.014
Relocated? 1990	0.447	0.306
Changed Schools? 1992	-0.107	0.425
Currently Employed? 1990	0.515 *	0.235
Church Attendance 1990	-0.220 ***	0.069
Parental Involvement 1990	-0.256 *	0.106
Community Involvement 1990	0.103 ***	0.032
Constant	8.009	0.795
R <sup>2</sup>	0.609	

\* p<.05

\*\* p < .01

\*\*\*p<.001

N=1906

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988



## Severe Delinquency and Fighting at School

Participation in extracurricular activities was not found to have an effect on severe delinquency or fighting at school among students who reported either a more externalized locus of control or negative self-concept.

## Under the Influence of Alcohol, Marijuana, Cocaine at School

For students who reported a more externalized locus of control or more negative self-concept during their sophomore year, participation in extracurricular activities was not found to have a significant effect on alcohol, marijuana, or cocaine use at school.

## Senior Year Locus of Control and Self-Concept

For students who fell within the lowest quartile for sophomore year self-concept, participation was unrelated to either senior year self-concept or locus of control.

Table 5.33 presents the results for the OLS regression of the senior year self-concept and locus of control with participation in extracurricular activities as the independent variable for students who fell within the lowest quartile for sophomore year locus of control. Participation in extracurricular activities was unrelated to senior year self-concept, but participation in *any activity* was associated with a more internalized senior year locus of control. The coefficient of the participation variable is *significantly larger* for students who reported a more externalized locus of control sophomore year ( $\beta=.103$ ) than for the larger sample ( $\beta=-.063$ ). This suggests that *participation has a stronger effect on locus of control for students who exhibit a more externalized locus of control than for the general student body.*

## Summary of Findings for Model 4

Participation in extracurricular activities plays a buffering role between low self-concept and involvement in light delinquency. Students who reported a lower sophomore year self-

concept but participated in extracurricular activities were less likely to engage in delinquency than non-participants. The effect of participation on light delinquency was stronger among students with lower self-concepts. For students who reported a more externalized locus of control for their sophomore year, those who participated in extracurricular activities were more likely to report a more internalized locus of control for their senior year. These findings are especially relevant for policy implications. I will return to these considerations in the following chapter.

Chapter 6 provides a summary of the study and discusses the implications of the results.

**Table 5.33: OLS Regression Results for the Effects of Extracurricular Activity Participation on 1992 Self-Concept and 1992 Locus of Control for Students With Externalized Locus of Control (sophomore year)**

	1992 Self Concept		1992 Locus of Control	
	$\beta$	s.e.	$\beta$	s.e.
<b>Independent Variables</b>				
Any Extracurricular Activity? 1990	0.052	0.043	0.103 *	0.044
<b>Control Variables</b>				
Asian	-0.103	0.093	-0.164 **	0.056
Hispanic	0.037	0.061	-0.075	0.060
African American	0.325 ***	0.056	0.117	0.075
Native American	-0.141	0.296	0.149	0.149
SES	-0.006	0.026	-0.014	0.023
Female	-0.209 ***	0.034	0.089 **	0.031
School Enrollment	0.021 *	0.009	0.012	0.008
Private	-0.043	0.075	-0.027	0.064
Urban	-0.004	0.048	0.061	0.048
Rural	0.009	0.042	0.005	0.038
Standardized Test Score 1990	0.003	0.002	0.010 ***	0.002
Relocated? 1990	0.015	0.048	-0.020	0.052
Changed Schools? 1992	-0.040	0.066	-0.023	0.064
Currently Employed? 1990	-0.025	0.039	0.031	0.035
Church Attendance 1990	0.009	0.010	0.007	0.010
Parental Involvement 1990	-0.009	0.019	-0.004	0.015
Community Involvement 1990	0.014 **	0.005	0.003	0.005
Constant	-0.621	0.122	-1.029	0.111
R <sup>2</sup>	0.063		0.051	

\* p<.05

N=2254

N=2252

\*\* p < .01

\*\*\*p<.001

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

## CHAPTER 6: SUMMARY AND DISCUSSION

The aim of this dissertation has been to highlight the necessity of taking into account social-structural arrangements when considering individual acts of self-destructive/delinquent behavior. Taking a sociological approach, the focus has been on the stressful social environments of schools and the subsequent strain and anomie among students that results. Particular attention here has been directed to the means through which students are “anchored” into the social environment of the school in a meaningful way, providing them with sources of social support and social control, and thus rendering them less likely to become involved in delinquent behavior.

Table 6.1 presents the hypotheses outlined in Chapter 3 and the results of my examination of them using data from the National Educational Longitudinal Study. In brief, my findings show that students who participate in the social environment of the school are less likely to commit light delinquency, less likely to get into fights at school, less likely to use marijuana and cocaine at school, and more likely to experience feelings of empowerment and personal control. Likewise, students who *do not participate* in extracurricular activities are more likely to report an externalized locus of control, while students who participate in *multiple* extracurricular activities are more likely to report an internalized locus of control.

This chapter is divided into two parts. Part One, *The Stressful Environment of Schools*, discusses the relationship between the social organization of schools and the destructive behavior of students. Here, I provide policy suggestions aimed at alleviating the strain and anomie that plague the social environments of high schools and reducing destructive behavior. Part Two, *The Importance of Social Structure for Mental Health*, takes a closer look at the relationship

between the self and the social environment, focusing on the self-concept and perceptions of control.

**Table 6.1: Summary of Hypotheses and Findings**

<p><b>H<sub>1</sub>: Higher levels of involvement/participation (social integration) at T<sub>1</sub> result in:</b></p> <p><b>a) Improved Self-concept at T<sub>2</sub></b></p> <p><b>b) More internalized Locus of Control at T<sub>2</sub></b></p> <p><b>c) Lower involvement in delinquent behavior at T<sub>2</sub>.</b></p> <p><b>i) Light Delinquency</b></p> <p><b>ii) Severe Delinquency</b></p> <p><b>iii) Fighting</b></p> <p><b>iv) Drugs, Alcohol at school</b></p>	<p></p> <p></p> <p></p> <p>Not supported</p> <p>Supported</p> <p></p> <p></p> <p>Supported</p> <p>Not supported</p> <p>Supported for participation measured as 0-1</p> <p>Not supported for alcohol at school.</p> <p>Supported for marijuana</p> <p>Supported for cocaine with participation as 0,1.</p>
<p><b>H<sub>2a</sub>: Of the students who report negative self-concept T<sub>1</sub>, those with higher levels of participation/integration at T<sub>1</sub> will be less likely to <i>report/engage</i> in delinquent activity at T<sub>2</sub>.</b></p>	<p></p> <p></p> <p></p> <p>Supported for light delinquency</p> <p></p>
<p><b>H<sub>2b</sub>: Of the students who report a more external locus of control at T<sub>1</sub>, those with higher levels of participation/integration at T<sub>1</sub> will be less likely to <i>report/engage</i> in delinquent activity at T<sub>2</sub>.</b></p>	<p></p> <p></p> <p>not supported</p> <p></p>
<p><b>H<sub>3</sub>: <i>Variability between various types of school activities (Sports, Arts, etc) and the delinquency-integration and/or efficacy/self-concept-integration relationship</i></b></p>	<p></p> <p></p> <p></p> <p>supported</p>

## PART ONE: THE STRESSFUL ENVIRONMENT OF SCHOOLS

The concept of workplace stress is a relatively new concept for social scientists, who only begin asking questions about it in 1989 (Ames, 2005). Prior to this shift, any incidents of destructive behavior, such as the high profile postal worker shooting sprees, were seen as problems grounded in the individual. It quickly became clear that something in the social environment contributed to these outbursts, and researchers began to look at the culture/structure of the workplace itself. We are now seeing the same shift to considerations of "school stress" and the potential negative outcomes. While the tendency has been to focus on single "trigger events" that "push someone over the edge", it is clear that more attention should be paid to the "culture and environment that pushes a kid to such a point that all he or she needs is a trigger event to set it all off" (Ames, 2005: 178). Many of the problems in our nation's high schools require a shift in our focus to the stressful, frustrating social environment in which the students are immersed.

Dollard's (1939) frustration-aggression theory posits frustration as the root cause of all forms of aggression. The source of frustration may either be the interruption of ongoing, goal-directed activity or the negation of a desire or wish (deprivation effect) (Fromm, 1973: 91). This theory was eventually challenged and expanded under the argument that outward aggression was only *one* possible response to frustration (Fromm, 1973), but the key element is the *psychological state that results from the frustration experience*.<sup>23</sup> When belonging and visibility are highly valued goals in adolescent society, a lack of integration within the school (the

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<sup>23</sup> The concept of anomie has been used by numerous theorists to refer to these *psychological states* of individuals (Putney, 1962: 431). The primary focus of these conceptualizations of anomie are not the socio-structural conditions that may be defined as anomic, but instead the *individual socio-psychological conditions* that may result. Social-psychological conceptions of anomia have likened it to "psychic isolation" and maladjustment or malintegration (Putney, 1962). Meier (1959) considered anomia as synonymous with "despair," "hopelessness," "discouragement," "personal disorganization," and "demoralization." MacIver's (1950) definition of anomia highlighted the "breakdown of the individual's sense of attachment to society" (85).

breakdown of the students' attachments to the school society) results in not only the *absence* of the positive aspects of social integration, but also the introduction of *strain* through goal blockage; the frustration, despair, hopelessness, and discouragement experienced by the student, thus, *are a result of an unhealthy social environment*.<sup>24</sup>

## **Social Organization and the Self**

Charles Cooley (1909: 29) remarked on issues of diversity; “*difference* is neither in human nature nor in capacity, but in *organization*, in the range and complexity of relations, in the diverse expression of powers and passions essentially much the same.” He expanded this idea to the organization of adolescents into deviant social groups (1909: 49);

In crowded neighborhoods, where there are no playgrounds and street sports are unlawful, the human nature of these gangs must take a semi-criminal direction; but with better opportunities and guidance it turns quite as naturally to wholesome sport and social service.

Instead of looking to the traditional theories of “bad genes” and biological explanations that were popular during his time, Cooley simplified the problem of deviance among adolescents to an issue of social organization. “Mischievous,” he said, was the result of “ill-directed energy.” Cooley (1909: 50) proposed that if these misguided (or, more appropriately, *unguided*) youth could receive a little “sympathetic attention from kindred but wiser spirits, at least half of the crime and vice of the next generation would almost certainly be done away with.” Thus, by rerouting “ill-directed energy” through guiding youth to develop positive forms of meaningful, self-affirming activity, deviant activity can be avoided. Vandalism, bullying, substance abuse, eating disorders, suicide, depression, and anxiety can all be seen as results of misguided energy; with more opportunities for participation in positive outlets of expression, the previously

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<sup>24</sup> Garbarino (1999) argues that violent boys exist in an “intolerable state of being” marked by a sense of injustice that produces feelings of shame; this “imposes the fear that one will cease to exist, the prospect of psychic annihilation” (132).

misguided youth may find purpose and meaning, and an improved sense of self and positive self-concept.

This study has highlighted the significance of extracurricular activities in schools and their relationship to status, identity, and visibility of students. I have shown that students who participate in extracurricular activities experience a greater sense of personal control and empowerment than non-participants. Gecas and Schwalbe (1983: 81) emphasize that the self-concept and efficacy-based esteem “depend on an individual’s opportunities to engage in efficacious action,” and that these opportunities are “both enabled and constrained” by socio-structural conditions. Agnew and Peterson (1989: 332) observe that “out of all of the institutions impinging on the adolescent, leisure and recreation activities are probably the most subject to policy manipulation.” Putting the two together, opportunity for the development and maintaining of adolescent identity becomes an issue of *the social organization of the school itself*. The established opportunities of the school are linked to lower levels of delinquency and more internalized loci of control; the question is whether these activities are available, accessible, and/or appealing to those who need them the most.

## **Structural Solutions**

Reducing destructive behavior of adolescents in schools requires addressing the stressful social environment of the schools themselves. Following the empirical support provided by my study, the following policy suggestions are composed of four main elements: opening up the opportunity structure; providing an inclusive, more tolerant environment by placing more equal value and attention on various school activities; providing means for higher integration and social support through increased student involvement in school activities; and creating outlets for healthy coping (externalization) of negative emotions.



## 1. Opening up the Opportunity Structure

In pursuit of positively valued goals, three types of strain are possible: *the failure to achieve these goals, the failure to achieve expectations, and the perception of being treated in an unjust/unfair manner* (Broidy and Agnew, 1997: 277). When there is blockage within the opportunity structure of the school that prevents students from achieving goals or expectations, a deprivation effect follows, producing more strained individuals (Hoffman, 2003: 757). Ransford (1968: 583) observes that these individuals, “blocked from full participation”, are likely to feel powerless. My findings show that students who do not participate in extracurricular activities are more likely to report an externalized locus of control, while students who participate in multiple extracurricular activities are more likely to report an internalized locus of control than students who participate in few or none. Locus of control is crucial in our understanding of delinquency; a more externalized locus of control was found to be significantly associated with higher levels of light and severe delinquency, more frequent alcohol, marijuana, and cocaine use at school, and more frequent incidents of fighting at school.<sup>25</sup>

Following this empirical support, it stands to reason that providing students with a wider range of outlets for participation and valued visibility within the school should reduce feelings of powerlessness as a significant source of strain and provide a pathway toward positively valued goals of visibility and recognition. If more students are provided outlets for participation in the school environment, higher levels of efficacy and empowerment should follow (Kinney, 1993); this should not only *reduce* the sources of strain (as experienced by students), but also *condition how strain is perceived and internalized*.<sup>26</sup> Cohen (1965: 6) summarizes strain as the

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<sup>25</sup> Aseltine et al (2000) have shown that individuals with a sense of empowerment are less likely to resort to delinquency in response to strain.

<sup>26</sup> The development of positive self-attitude and self-efficacy *conditions* the relationship between strain and negative emotions; participation in meaningful activity should prevent or weaken the development of negative self-attitudes.

“insufficiency of means to the attainment of goals”; by opening up the opportunity structure of the school, students will have more opportunities (means) to engage in meaningful behavior towards the achievement of positively valued goals (recognition, visibility, status). The experienced disjunction between goals and the available means to achieve them, as well as the individual choice of adaptation to strain (see Chapter 2, Table 2.1), are contingent on both the opportunity structure in which the individual is embedded and the values of the culture itself. Since, as Cohen (1957: 10) asserts, the opportunity structure “consists of or is the result of the actions of other people”, this becomes an issue of social organization. The question then becomes whether schools are providing a wide enough range of activities to ensure that a sufficient number of student interests are covered.

## **2. Providing an inclusive, more tolerant environment by placing more equal value and attention on various school activities.**

While availability and sufficiency of opportunities is a crucial component, opportunity structure is not the only significant factor in the examination of school-sponsored activities. For example, Eder and Parker (1987) found that simply *providing* opportunities for participation in school activities does not alter the peer culture of adolescents. Careful attention needs to be paid to the *types* of activities that the school is offering, and the amount of *value* and recognition that each one receives. Not everyone wants to get involved in some activities, such as varsity sports. When a school only supports and promotes certain activities, *a shortage of opportunities* for participation and positive visibility results; some students are inadvertently left out and remain invisible to others, and (metaphorically) to themselves. As I have shown, the consequences of

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Kaplan (1976) found individuals maintaining negative self-attitudes to be “significantly more likely” to engage in delinquent activity. Individuals with a greater sense of self-efficacy and empowerment are *less likely* to react to strain with negative emotions (Jang, 2003: 95; Gecas, 1982; Kaplan, 1975).

this social isolation include feelings of powerlessness and various forms of deviant/destructive behavior.

The role of the school in structuring such extracurricular activities is of importance, as is the amount of *value* each activity receives in the larger school culture. To this end, issues in differential value for school activities must also be considered.

There is a continuum of activities at the high school level, from highly prized to devalued; athletics is a high-status activity, music is a moderate status activity, and debate and hobby clubs are low-status activities. This status ladder results in athletes having much greater prestige and power.

McNeal, 1995: 64

Because certain extracurricular activities are more widely attended by members of the school community, they become the focus of the social life of the school as “significant cultural events” (Eder and Parker, 1987). Participants in these events are highly visible to other classmates, teachers, and administrators, and therefore attain more positive visibility within the school (Ekherth, 1989; Newman, 2004). These students are likely to hold core status in elite groups, since status is contingent on “being known” by your peers (Corsaro and Eder, 1990: 208).<sup>27</sup> Those who are devalued and lack outlets for participation will perhaps develop resentment and animosity for those with privilege and status. As Broidy and Agnew (1997) assert, strain often follows feelings of being treated in an unjust or unfair manner. Newman (2004) supports this assertion, observing that many school shooters “appear to be aiming at a structure or system of prestige rather than particular people,” but, for those who *do* target individuals, it is often those at the top of the social hierarchy (266, 249).

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<sup>27</sup> At Columbine High School, high value was placed on athletics, and athleticism itself was therefore admired and valued as a trait or characteristic. The athletes were able to “get away with” much more than anyone else; their high status allowed them to push around the Trenchcoaters without necessary punishment or disciplinary action, causing resentment to arise from the undefended victims. In defining athletic participation as ideal and by rewarding those who participated in these activities, those who did not take part were by default defined and labeled as less important (devalued).

In my comparison of participation in different extracurricular activities, varsity sport participation was the only category that was associated with a more positive self-concept; intramural sport participation was actually associated with a *more negative* self-concept. This, no doubt, reflects the “cult of the athlete” in high school culture (one that reflects the culture of society). Only varsity sport participation and student government involvement were linked to a more internalized locus of control. By more equally distributing value and attention to a larger variety of school activities, the benefits that come with participation may be distributed to a wider range of activities, and the stratification that is currently reinforced and supported by school officials will be reduced. Eder and Parker (1987: 210) support this point:

Administrators and teachers could alter the peer-status structure of a school and the peer culture by giving prestige and visibility to other achievement oriented activities. Special effort must be made to increase the importance of [these] events. Thus, while it may not be possible to alter the importance of peer status or peer culture for adolescents, it may be possible to influence the nature of the structured activities that provide students with the greatest visibility.

As it currently stands in the average American high school, very few student activities qualify as “significant cultural events”. Students who are less involved in the recognized, dominant activities of the school have less control over available school resources; as my findings have shown, these students are more likely to attribute control and power to an external source. As socially disconnected individuals, they may affiliate with school subcultures, which may be marked by a concern with “seeking more control over their lives through defiance of rules, authority, and academic work” (Corsaro and Eder, 1990: 210). These students are, in a sense, indirectly driven into association with social groups presenting “definitions favorable to delinquency”.

We must examine which groups are privileged within the school from the administrative standpoint; careful attention must be paid to the promoted institutional values of the school, and the associated behaviors, belief systems, appearances, and activities (groups) that are rewarded

as a result. If schools recognize, value, and support a wider range student interests and extracurricular activities within the school social environment, individuals involved in those activities will develop a stronger attachment, commitment, and involvement to the school (resulting in greater social control). In contrast, those who are left out, whose activities and interests remain unsupported, may become detached and develop resentment and bitterness, and become alienated within the school environment.<sup>28</sup>

### **3. Providing means for higher integration and social support through increased student involvement in school activities.**

In accordance with social bonding/control theory, the stronger the adolescent's social bond to the academic institution the less likely s(he) is to commit delinquent acts (McNeal, 1995: 63). Kinney (1993: 29) cites a "lessening concern" with school-wide popularity among students who become involved in school sponsored activities; their involvement immerses them within a more supportive social environment, providing them with senses of security, confidence, and stability. Thoits (1995: 70) observes that researchers are "especially optimistic about designing interventions to boost or manipulate social ties and/or perceived social support for individuals who are confronting particular stressors . . . the most frequent intervention strategy involves introducing new social ties".

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<sup>28</sup> Gaines (1999) comments on varsity athletics, conformity, and the school's placement of value on both, which, according to her, caused "the outcast thing." Gaines comments, "I think what we can draw from Columbine is that the school is not taking responsibility for dealing with status inequality. They reinforce it at every turn." (Mann, 1999: 2). She suggests that schools should do everything in their power to make sure that no single group dominates all the activities or attention of the school. While Gaines suggests eliminating varsity sports and events centered around them (such as pep rallies) to ensure or create a more inclusive and tolerant environment, this would be unnecessarily extreme; removing sports removes self-affirming activity for many students, causing a loss of structure and meaning for *these* individuals, thus spreading the original problem further across the board. The problem is not necessarily that some students receive too much attention, but that too many students receive too little. Rather than limiting opportunities for a select group of students, *increasing* opportunities for *all* students (while more equally distributing value) speaks to a much wider range of student interests, and ensures more equal representation (visibility).

School administrators could make special efforts to increase participation among students who participate in few or zero extracurricular activities.<sup>29</sup> Newman (2004: 283) notes that teachers, for example, can “create the social space students need to be different. They give kids who don’t care for football or cheerleading a safe space to stretch their wings in like-minded company”; school administrators can provide teachers with the financial, moral, and social support to “run activities that will include the round pegs who do not fit in the existing square holes” (283). My analysis showed that students who participate in *any* activity have lower light delinquency scores, are less likely to get into fights at school, less likely to use marijuana and cocaine at school, and exhibit a more internalized locus of control. My findings have shown many of these relationships *are even stronger* among students who experienced feelings of powerlessness and negative self-concept during their sophomore year; over the course of their high school career, these students stand to gain the most from participation in the school environment. Without this integration into the school environment, these students miss out on crucial sources of positive self-concept, empowerment, and social support.

#### **4. Creating outlets for healthy coping (externalization) of negative emotions.**

All people will experience anxious, worrisome, and depressed thoughts from time to time, but they vary in how well they are able to deal with these thoughts. While some people successfully cope with negative thinking, others may use ineffective strategies that even trigger further strings of negative thoughts.

Muris, 2002: 337

The central focus of general strain theory is that strain generates negative emotions or “negative affective states” that create “internal pressure for corrective action” (Aseltine et al, 2000: 257). While Merton’s strain theory presented deviance as a behavioral response to undesirable social situations, Agnew (1992) extended the theory to focus on the *emotional*

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<sup>29</sup> Thoits (1983: 178) supports; “The isolated person should experience significant benefit from an identity acquisition, since it adds substantially to his/her purpose in life”.

impact of strain, the development of negative affect, and the adoption of *behavioral* and/or *emotional coping strategies* to manage the effects of strain.<sup>30</sup>

Behavioral coping strategies consist of modifying behavior to either maximize positive outcomes or minimize negative outcomes; behavioral coping mechanisms are not by definition delinquent, but may easily take this form.<sup>31</sup> Brezina (1996) presented three forms of delinquent behavioral coping responses to strain: *escape-avoidance*, *compensation*, and *retaliation*. *Escape-avoidance* involves escaping strained social situations in an attempt to minimize exposure to noxious stimuli, thereby reducing chances of developing negative affect (Merton's *retreatism*). The competitive academic climate of schools, for instance, may lead some students to turn to delinquent acts as mechanisms of escape (Felson, 1994); tardiness, cutting or skipping classes, truancy, academic apathy, or dropping out of school may all be mechanisms of escaping a frustrating school environment. *Compensation* serves to alleviate the experience of strain and negative affect by countering the effects; the use of drugs/alcohol may induce positive emotions (or temporarily neutralize negative emotions) to compensate for negative affect.<sup>32</sup> *Retaliation* simply involves lashing out through physical or verbal aggression, vandalism, or theft against sources of strain to satisfy feelings of anger and resentment.<sup>33</sup>

Emotional coping strategies consist of acting directly on the negative emotions resulting from experience of strain. This may involve more conventional means such as exercise and meditation or delinquent mechanisms of escape such as the use of drugs and alcohol. Agnew (1992: 70) clarifies that, in each case, the focus is on "alleviating negative emotions rather than cognitively reinterpreting or behaviorally altering the situation that produced those emotions".

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<sup>30</sup> Folkman (1984) outlines coping as "cognitive or behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by [a] stressful transaction" (843).

<sup>31</sup> Agnew (1992) notes that vengeful, outer-directed behavior is a common form of behavioral coping.

<sup>32</sup> Thoits (1994) outlines this response as efforts to compensate for "painful circumstances by investing in more rewarding role domains" (144).

<sup>33</sup> Ames (2005) observes that school shooters generally observe their acts as retaliations/rebellions (149).

Students who use alcohol, marijuana, or cocaine at school may be acting on negative emotions produced (or enhanced) by the school environment -- attending school “under the influence” may alleviate these negative emotions and counter the effects of strain produced by the social environment.

While coping ability has traditionally been judged “on the possession of personality characteristics that help people defend against external threats” (Pearlin and Schooler, 1978: 12), it is important to consider the availability of opportunities for coping built into (or at least supported by) the social structure of the school itself. Coleman (1965: 45) maintained that, “if it were not for interscholastic athletics or something like it, the rebellion against the school, the rate of dropout, and the delinquency of boys might be far worse than they presently are”. Eder and Parker (1987: 205) laud athletics as an “important avenue for the expression of aggression”. Landers and Landers (1978: 299) cite a “release from tension and aggressive impulses” through participation in extracurricular activities.<sup>34</sup> Schools are in a position to ensure that students have access to healthy coping outlets via participation in extracurricular activities. As outlined in the first three elements above, increasing student involvement by opening up the opportunity structure and by more evenly distributing the value and recognition that activities receive allows for a broader range of pro-social coping outlets for students; the stress, anxiety, and general negative affect experienced by students can then be channeled into these outlets, as opposed to delinquent avenues or destructive coping mechanisms/responses.

## **Conclusions: The Importance of Participation in the School Environment**

The benefits that accompany participation in extracurricular activities come from a variety of sources. Landers and Landers (1978: 302) suggest that participation provides a “relief from boredom, moral lessons, perceived peer status, non-deviant role models (i.e. coaches and

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<sup>34</sup> See Appendix A, Strain Model of Delinquency/Destructive Behavior



teachers), constructive use of time, interpersonal skills and knowledges . . .”. Otto and Alwin (1977: 104) propose that extracurricular involvement within the school provides students with exposure to a “range of potentially functional socializing experiences which equip [them] with interpersonal, organizational, and leadership skills that may be translated into later socioeconomic advantage”.

Aside from the addition of the positives, participation results in a reduction of the negatives. Landers and Landers (1978) cite a “protective association between extracurricular activity participation and involvement in delinquency and other risky behaviors”. Youniss, Yates, and Su (1997) found that students involved in adult-endorsed extracurricular activities report lower rates of substance abuse than non-involved students. My findings have shown that students who participate in the social environment of the school are less likely to commit light delinquency, less likely to get into fights at school, less likely to use marijuana and cocaine at school, and more likely to experience feelings of empowerment and personal control. Social integration into the school environment anchors students in a structured, ordered existence; the social support, norms, routine, and identity enhancement that accompany social integration provide buffers against sources of strain *and* outlets through which to cope with the stressful environment of the school.

## **PART TWO: THE IMPORTANCE OF SOCIAL STRUCTURE FOR MENTAL HEALTH: THE SELF-CONCEPT AND PERCEPTIONS OF CONTROL**

While much of this dissertation has focused on the link between participation and delinquency, it is important to note that not every non-participant will inevitably engage in delinquency. As Cohen (1959: 469) observes, individuals who choose conformity and resist deviance may still “carry a chronic load of frustration”; they do not act on their negative affect,

and do not engage in delinquent behavior. For this reason, observable delinquent behavior may not be the main problem; of greater importance is the “chronic load of frustration” and strain that lurks beneath the surface, within the individual.

The primary focus of this study has been the reliance of the self on the social environment. Sartorius (2003: s101) defines mental health as “the state of balance that individuals establish within themselves and between themselves and their social and physical environment”. While predisposing factors to mental health may be found in the mind (the purely psychological), precipitating factors are to found in the social environment. From a policy/interventionist standpoint, then, it is necessary and more productive to attend to the potential precipitating effects of the *social environment* on mental health, as opposed to the predispositions of the individual social actors. Taking the lens down to the individual level, we displace the role that the larger social environment plays in shaping the behaviors, attitudes, and self-concept of the individual.

The importance of many aspects of the self-concept (self-efficacy, perceptions of control) becomes apparent when we consider the consequences of their inhibition or suppression, which in sociology is synonymous with the concept of alienation (Gecas, 1982). For Marx, alienation was essentially a question of internal vs. external locus of control, *of the empowered vs. the powerless*. In our considerations of destructive behavior among adolescents, the “powerless” deserve special attention; Han (1971) found that the powerless and alienated are more likely to become involved in extreme behavior (or to join “extreme movements”). Gecas and Schwalbe (1983) observed that the powerless are more dependent on the opinions of others for their self-concept.<sup>35</sup> Bandura (1997: 153) maintains that the “perceived inability to influence events and

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<sup>35</sup> “In short, the looking-glass self as a process in the development of self-esteem may be most relevant to those in subordinate status” (Gecas and Schwalbe, 1983: 82).

social conditions can significantly affect one's life, and can give rise to feelings of futility and despondency as well as anxiety".

This dissertation has explored two components of mental health; the *self-concept* and *locus of control*. My aim has been to examine how adolescent identity is related to the social structure of the school environment. While my findings indicate that student self-concept does not depend on participation in the school social environment (and, more importantly, that the best predictors of self-concept senior year are self-concept and locus of control sophomore year), locus of control senior year varied according to participation sophomore year, *even after controlling for locus of control and self-concept sophomore year*. Locus of control, then, is not a set psychological characteristic, resistant to change or intervention. Smith (1989: 229) observes that a number of studies report "significant shifts toward an internal locus of control in subjects who were exposed to interventions designed to help them acquire new behavioral competencies".

When students believe that they have no effect on their social environment, the resultant sense of powerlessness leads to what Seligman (1975) referred to as "learned helplessness", from which depression and a more negative self-concept are soon to follow (Gecas 1989). An unresponsive social environment allows individuals to drift into apathy, cynicism, and detachment. If individuals/students are allowed to develop an external locus of control, they may also develop feelings of inefficacy (loss of faith in oneself and one's abilities) and a more negative self-concept.

My findings have shown that a more internalized locus of control during the sophomore year is associated with a more positive self-concept during the senior year. Thoits (1995: 60) notes that "an impressive number of studies" have shown that a sense of control "both directly reduces psychological disturbance and physical illness and buffers the deleterious effects of

stress exposure on physical and mental health”. Interventions geared towards improving the mental health of adolescents in schools, then, should focus on increasing the sense of empowerment for students, and not simply inflating the self-concept (as with the recently popular “self-esteem movement”<sup>36</sup>). Increasing student involvement in extracurricular activities should have a direct effect on the mental health of students; my findings have shown that each additional activity in which students participate equates to improvements (more internalized) locus of control. Furthermore, students with more internalized loci of control report more positive self-concept over time.

Recent research has shown rises in beliefs in external control for the larger society. The consequences for this shift are numerous; apathy, cynicism, detachment, depression, and anxiety all accompany feelings of powerlessness. Human beings are driven to “make their mark” on the social world, to “raise [themselves] beyond the passivity and accidentalness of [their] existence into the realm of purposefulness and freedom” (Erich Fromm, 1955: 37). The two avenues that fulfill this need are *creation* and *destruction*.

Man can be driven by love or by the passion to destroy; in each case he satisfies one of his existential needs: the need to “effect”, or to move something, to “make a dent.” Whether man’s dominant passion is love or whether it is destructiveness depends largely on social circumstances.  
Fromm, 1973: 26

Destructive behavior in our nation’s schools may be a response to blocked opportunity structures; students with an absence of outlets for creativity, self expression, and visibility may seek out other, less pro-social outlets. The strain that results from the stressful social environment of schools has drastic consequences for students. Without adequate social integration into the school environment, feelings of powerlessness and a

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<sup>36</sup> Self-concept and self esteem have been used synonymously in much of the literature; both allude to beliefs about oneself, particularly one’s self worth. Twenge (2006) notes that self-esteem doesn’t protect against teen pregnancy, juvenile delinquency, alcoholism, or drug abuse. The self-esteem movement, instead of creating well adjusted, happy children, has created an “army of little narcissists” (Twenge, 2006).

more negative self-concept soon follow. Schools, as social institutions that collect adolescents into large groups, are in a position to reconstruct the social environment so as to ameliorate many of the socio-psychological conditions that arise therein.

## **CHAPTER 7: CONCLUSIONS**

### **LIMITATIONS OF THE PRESENT STUDY**

This section highlights several limitations of the present study, including the age of the data, the timing of the survey (and need to focus on “periods of transition”), and the issue of student self-selection into extracurricular activities.

#### **Age of Data**

The first drawback of the present study is the age of the data. The first wave of the NELS occurred in 1988; my sample includes the waves from 1990 and 1992, meaning that these data are now sixteen to eighteen years old. An entire generation of students has passed through high school since the first wave of the NELS. The past ten years alone have seen great advances in technology, particularly in the ways we communicate and interact with one another (“virtual capital”, cell phones, texting, Myspace, Facebook). Additionally, as society, and schools, have become more complex, the role of the family as the dominant agent of socialization has been increasingly challenged; the influence of the school environment has no doubt grown (and become more complex), and its influence on the construction and maintenance of the adolescent identity has only become more prominent. Thus, more contemporary data are necessary to examine the modern relationship between social integration in the school, self-concept, and delinquent behavior.

#### **Student Self-Selection into Activities**

Perhaps the largest drawback of my analysis is student self-selection into extracurricular activities; students who are less delinquent, and have a more positive self-concept or more internalized locus of control should be more likely to participate in extracurricular activities. The issue here is reverse causality; lower self-concept, a sense of powerlessness, and

delinquency may cause less (or zero) participation in extracurricular activities. Although I did not control for sophomore year delinquency, I included indicators for sophomore year self-concept and locus of control in an effort to isolate the effect of participation on my dependent variables. Future research could include an experimental design, where some schools actively increase student participation; pre and post measurements of delinquency, self-concept, and locus of control of students could then be compared to schools where there was no intervention.

Another approach is simply to compare schools with higher student participation rates with schools with lower student involvement. If other considerations for school characteristics, such as size, urbanicity, public-private distinction, and demographic composition of the students are held constant, it is doubtful that any differences between the schools in terms of student delinquency, self-concept, and locus of control would be an artifact of pre-existing characteristics of the students, and should instead be a result of differences in student participation in school activities.

### **Timing of the Survey**

It would also be to examine data that includes information from students' first year in high school. As Eckert (1989) observes, the emergence of many social groups and the status hierarchy almost occurs "overnight" from middle school to high school. For many students, the transition from middle school to high school is their first experience of the "mass society" (which will be further discussed below). A close examination of this key period of transition would be useful in understanding adolescent identity, strain, and delinquency.

Another consideration is the age of the students in my analysis. The self-concept is shaped at a much earlier age, and children enter into extracurricular activities long before high school. This early participation puts them on a path into or outside of involvement in extracurricular activities, and early socialization (both in and outside of the home) sets children

on certain loosely structured paths. My measurement of high school participation misses out on this early experience; any intervention aimed at increasing school involvement (and thereby altering self-concept and locus of control) would be better served by considering younger students. Increasing student participation at an early age would arguably increase high school participation at a later date. By providing students with more paths towards valued participation in the high school setting, they will be more likely navigate the critical transition into high school with less strain, anomie, and the resultant anxiety and stress.

## **CONCLUSION**

This dissertation has argued for the necessity of considering social-structural forces in identifying causes of destructive behavior in our nation's schools. It is important to note, however, that interventions aimed at altering these structural conditions will clearly not affect those social actors with certain psychological conditions that lie outside the bounds of the influence of social structure. The aim of this study and of future research to follow is to assist in the development of interventions that may alter structural conditions within the school in order to *minimize* or significantly reduce incidents of destructive behavior. While this study focused primarily on general strain and social integration theories, there is clear overlap with issues in social learning and differential association. Closer examination of clique dynamics within the context of the individual school itself would provide further insight into notions of student visibility, participation, and social integration.

The behavior of the individual is motivated, shaped, and constrained by the larger society. The life of the adolescent is centered around the academic institution; the pursuit of visibility, recognition, and efficacy within this environment is profoundly influential to the continued development of the adolescent identity. The problem we face lies within the academic institution itself, and the social structure that it silently creates and continually reinforces. The



social stratification of our schools has created a stressful environment that breeds hostility and intolerance, one in which hate and resentment easily arise and remain unchecked, often resulting in the eventual eruption into the forms that we see so frequently in today's headlines. Certain groups and individuals are often overlooked and "underprivileged" within the institution, damaging their self-concept and diminishing their sense of empowerment, leaving them to feel powerless and insignificant. Their interests, beliefs, and activities are not valued, or *devalued*, even, by the institution, and they become marginalized within the social structure of the school itself. Individuals in this position are likely to experience strain and anomie, and may turn to alternative avenues of expression and representation. Cut off from mainstream culture of the school, they may instead participate in or create a counterculture. As one insightful student noted, "All kids need to belong, and if they can't belong in a positive way at the school, they'll find a way to belong to a marginal group like a cult or gang" (Cohen, 1999: 2). It is when an individual experiences this lack of meaning, resulting from an absence of self-affirming activity through blocked opportunity structures, that they may turn against themselves or against the outside world; socially disconnected, they are left with nothing to lose, in a seemingly hopeless situation.

The social roots of destructive behavior are to be found in the ties (or, more appropriately, the *lack of ties*) between the individual and the larger society. Individual acts of self-destruction or delinquency may not be grounded in individual factors alone, but may in fact be a response to undesirable social conditions. Constructing solutions to the various problems with our nation's schools involves addressing these social conditions; hope for change and a brighter future depend on our willingness to deconstruct these institutions as they currently stand, and to reevaluate and rebuild the structure that permits these problems to develop and continually reproduce. By more equally distributing status and value while providing a wider range of

outlets for self-affirming activity, more students will have the opportunity to “be seen,” feel valued, and know self-worth; as a result, destructive behavior, in all of the various forms, can be drastically reduced.

## **DIRECTIONS FOR FUTURE RESEARCH**

In my examination of destructive behavior in schools, I targeted the adolescent identity, as measured through the self-concept and perceptions of control, and social integration via extracurricular activity participation. While these variables shed light on the larger problem of delinquency and negative affect of adolescents, additional factors that fell outside the scope of this study warrant considerable attention and examination. This section suggests directions for future research. These include: other measures of the dependent variables; alternative measurements social integration; the looking-glass self and student visibility; the rise of materialism in adolescent culture; the influence of SES, race-ethnicity, and gender; variability among urban, suburban, and rural schools; and comparisons between public and private schools and the influence of school size.

### **Other Measures of the Dependent Variables**

For temporal and spatial considerations, I did not include general alcohol and drug use as dependent variables in this study. Because my focus was the influence of the school environment, I decided to only focus on alcohol and drug use *at school*. This does not mean, of course, that what occurs within the school does not affect behavior in the home. Future expansions of this project will consider the relationships between social integration within the school, self-concept and locus of control, and general delinquency, both within and outside of the school environment.

Because my measures of delinquency are self-reported and retrospective, it is quite possible that these measurements are an understatement of actual occurrence. Social-desirability response bias no doubt plays a role; to what degree do students forget or omit delinquent behavior?

While I excluded high school dropouts from the analysis, these students should be considered in future research. Although it is impossible to ascertain the reason for dropping out, dropouts could be the best example of a *retreatist response to strain*. If these students are facing a stressful social environment, and lack the social resources to buffer the effects of strain or cope, dropping out of school is a mechanism of escape.

### **Alternative Measurements of Social Integration**

An alternative for measuring social integration in schools to that found in my study is found in the *depth of involvement within activities*; does the student who participates as an officer or team captain fare better than the student who is a base-level participant? What are the differential outcomes across the various levels of participation within each activity? For this approach, I created variables for participated in *intramural*, *junior varsity*, *varsity*, and *varsity captain*. For non-sport activities, I created variables for *participated* and *participated as an officer*. Table 7.1 compares the mean scores for light school delinquency, severe delinquency, self-concept, and locus of control for each of these categories. Students who participated as officers in the band or school play had more positive self-concepts and more internalized loci of control than students who participated as regular members in their activity. Students who participated as captains of the basketball or football team reported more positive self-concepts and more internalized loci of control than varsity, junior varsity, and intramural participants (with the exception of varsity basketball participants, who reported a more internalized locus of

control than students who participated as a captain). There does not appear to be any clear association between depth of participation and light or severe delinquency.

**Table 7.1: Exploratory comparison of Depth of Involvement in Extracurricular Activities**

	Light School Delinquency	Severe Delinquency	Self- Concept	Locus of Control
<b>Sample</b>	<b>5.226</b>	<b>0.037</b>	<b>0.024</b>	<b>0.070</b>
<b>Participated in Band</b>	4.523	0.026	0.008	0.128
<b>Officer in Band</b>	4.741	0.017	0.083	0.164
<b>Participated in Play</b>	4.759	0.028	0.022	0.152
<b>Officer in Play</b>	5.442	0.059	0.158	0.222
<b>Intramural Football</b>	5.590	0.044	0.041	0.082
<b>Junior Varsity Football</b>	5.755	0.092	0.159	0.014
<b>Varsity Football</b>	5.530	0.052	0.209	0.050
<b>Captain Football</b>	6.098	0.094	0.237	0.069
<b>Intramural Basketball</b>	5.420	0.040	0.056	0.020
<b>Junior Varsity Basketball</b>	4.937	0.061	0.151	0.095
<b>Varsity Basketball</b>	4.585	0.030	0.144	0.175
<b>Captain Basketball</b>	5.129	0.043	0.339	0.151

Another approach would be to consider is examining the number of school activities offered by the school; do schools who offer more activities have less delinquency and higher self-concept among their students? Similarly, if a school offers a wide array of activities, do students need to participate in more extracurricular activities in order to reap the benefits of participation? This approach would look for a *threshold effect* of student participation as it relates to the total number of activities provided by the school. Also of interest is the “over-scheduling hypothesis” (Mahoney, et al, 2006); is there a threshold after which each additional activity ceases to add to the buffering effect, *or*, even begin to detract from it? At face value these considerations appear to be largely an issue of school size, with more

identities/participation required for sufficient integration in larger schools. For this approach, I created a “school offers” variable for each of the activities. In future research, I intend to assign schools both an “available activities score”, constructed from the dichotomous “school offers” variables, and a “school delinquency score.”

Finally, my study did not include a detailed analysis of students who participated in *multiple sport activities*. Students who participated in three seasonal sports (fall, winter, spring) were grouped together as “participated in any” varsity sports. The same applies to intramural sports. The added benefit of participating in multiple activities is lost with these students.

### **The “Looking-Glass Self” and Student Visibility**

The primary aim of this study was to examine the relationship between adolescent identity and the social environment of schools. Future research should include a deeper focus on the notion of *visibility*, drawing from Cooley’s *Looking-Glass Self*.

The NELS provides two avenues for the exploration of student visibility and recognition within the school environment. Students were asked whether they received any of the following awards or were recognized for their performances; *b) elected officer of a school class, c) won and academic honor, d) participated in a science or math fair, e) received special recognition for good attendance, f) received special recognition for good grades or honor roll, g) received special recognition for writing an essay or poem, h) named most valuable player on a sports team, i) received a community service award, j) participated in a vocational/technical skills competition*. Students were also given option a) *I have not won any awards or received recognition*.

As a preliminary exploration, I constructed a recognition/visibility score composite variable based on the above items. Higher recognition scores for sophomore year were found to be related to lower involvement in light school delinquency ( $p < .001$ ) and a more internalized

locus of control during senior year ( $p < .01$ ). There was no significant effect on senior year self-concept.

The NELS also contains items that can be constructed as a “looking-glass self” component; students were asked how they thought other students perceived them (see below). I intend to examine the relationships between these items and self-concept, locus of control, and delinquency.

***How do you think other students see you?***

- *As being popular*
- *As being athletic*
- *as being socially active*
- *As a good student*
- *as being important*
- *as a trouble-maker,*
- *as part of the leading crowd*
- *as not fitting into any group*

## **The Rise of Materialism in Adolescent Culture**

Kasser (2002) found that people who are highly focused on materialist values report more depression, less self-actualization, lower self-worth, and are more likely to abuse drugs and alcohol. Individuals with a materialistic value orientation are also more likely to exhibit aggressive and conflictual behavior in dating relationships (Kasser, 2002). The problem only seems to be growing; recent work by Schor (1998) has shown increases in materialistic values among young people (87).

I intend to look at effects of materialistic values and volunteerism on *delinquency*, *self concept*, and *locus of control*. The NELS allows for exploration into these relationships. My preliminary analysis confirmed my hypotheses; students who agreed that it is “important to have lots of money” were more likely to get into fights at school, to be under the influence of alcohol at school, to be involved in light or severe delinquency at school, and to report feelings of

powerlessness. Students who agreed that it is “important to help others in the community” had a more internalized locus of control (greater sense of empowerment), more positive self-concept, were less likely to be involved in light or severe delinquency at school, and less likely to use alcohol, marijuana, or cocaine at school.

Materialism is of particular concern for individuals who are undergoing a transition in life. Kasser (2002) found that individuals who undergo “status panic” are more likely to turn to *materialistic outlets in an effort to compensate for the incomplete identity*. First year college students, for instance, are more likely to own logoed university items than fourth year students. Similarly, inexperienced athletes are much more likely to wear highly visible, branded sportswear than experienced athletes (56). For high school students, it would prudent to target first year students who are more susceptible to status panic; developing opportunities for the construction of stable identities would assist these students in this major life transition.<sup>37</sup>

### **The Influence of SES, Race-Ethnicity, and Gender**

Dumais (2006) found that less-privileged children benefit more from participation in activities than do more-privileged children. I expect a similar effect among high school students; the strength of social integration-delinquency relationship should also vary among SES groups, racial-ethnic groups, and between the sexes. Further expansions of this study will consider the relationships among social integration, self-concept, locus of control, and delinquency for various demographics; for whom is school involvement most important? Which groups stand to lose the most from social isolation within the school? This extension of the current analysis should prove to be especially useful in the development of policy and intervention strategies.

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<sup>37</sup> One possible program that has shown promise is volunteerism and community work. Rareshide and Kern (1991) cite the positive relationship between volunteerism and psychological well-being.

Many of the background variables in this study exhibited significant relationships with all of my dependent variables.

For example, sex was the most consistently significant control variable in this study. Females were less likely to engage in all forms of delinquency than males, experienced lower self-concept and a more internalized locus of control than males. Female participation in extracurricular activities and the relationship with delinquency, self-concept, and locus of control deserves closer examination. Eder and Parker (1987) observe the tendency for male athletic activities to be “the main cultural events of secondary schools in the U.S.,” and that they “have provided male athletes with considerable status among their peers” (202); the lack of official support for female athletics limits its “cultural significance within the school” (204). The resultant low visibility of female athletics fails to provide adolescent girls with avenues of achievement and peer status; females are generally able to achieve visibility largely by their association with the more heavily valued male athletic events, most often through participation as cheerleaders (Eder and Parker, 1987: 209).

For adolescents, social status in the school environment for girls has traditionally been achieved through their association with male athletics. With the rise in popularity and support of female athletics, this “traditional” relationship has no doubt changed. I would like to compare the outcomes (delinquency, self-concept, locus of control) of females who participated in athletics to those who participated in cheerleading (and other outlets such as performance arts, student government, etc). As new definitions and scripts for masculinity and femininity emerge, we will no doubt see changes in the relationships between participation, self-concept, empowerment, and delinquency among females and males.



## **Variability among Urban, Suburban, and Rural Schools**

Further expansions of this study will consider the relationships of my key variables in urban, suburban, and rural schools. Newman (2004) noted that for rural communities, school plays a crucial role as “one of the few public stages” where an attention seeking adolescent can act out for visibility;<sup>38</sup> in an urban setting, there are other “potentially more meaningful” outlets for expression (55). I intend to explore the differences between rural, urban, and suburban contexts as they relate to destructive behavior, efficacy and locus of control, self-concept, and social integration within the school.

## **Comparisons between Public and Private Schools and the Influence of School Size**

The importance of social integration becomes more critical in the mass society. Students who transition from the “intimate community” of middle school to a high school environment defined by “impersonal association” are likely to face social disorganization, anomie, alienation and isolation (Germani, 1978: 50); this isolation produces a sense of powerlessness which can be “personally devastating and destructive” (Neal, 1964; p216). Burke (1991) cited the concern that “the advent of a mass society would lead to a loss of identity and hence to widespread anxiety or stress” (836). Students who enter into the mass society of larger high schools will face a larger threat to identity (a more “intensified anomic society” (Brustein, 1996) than students who attend a smaller, more intimate schools.<sup>39</sup>

Mass society theorists argue that alienated and anomic persons internalize a sense of powerlessness and feel an “inability to control social events,” and that this feeling may increase

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<sup>38</sup> or, in the case of would-be school shooters, one of the few public stages where they can “create a spectacle” (Newman, 2004: 55).

<sup>39</sup> Parsons (1954) supports, “Any increase in anomie may be a consequence of almost any change in the social situation which upsets previous established definitions of the situation, routines of life, or symbolic associations” (139).

their willingness to join extreme movements or cause them to be more vulnerable to extreme behavior (Han, 1971: 409). In contrast, Neal and Seeman (1964) have shown that membership in certain organizations is associated with a relatively strong sense of control over events and a low perception of powerlessness (225). For this reason, Putnam (2000: 405) endorses smaller schools, noting that they

*encourage more active involvement in extracurricular activities than big schools – more students in smaller schools have opportunity to play trombone or left tackle or King Lear. Smaller schools, like smaller towns, generate higher expectations for mutual reciprocity and collective action. So deconcentrating megaschools or creating smaller “schools within schools” will almost surely produce civic dividends.*

## **Afterthought on Social Isolates, Intolerance**

The problem of self-destructive behavior in the academic institution is not limited solely to questions of social integration into the school environment; this project focuses on these elements in order to simplify the efforts of a preliminary study while focusing on what are perhaps the major contributing factors. Of equal, if not greater, importance is the environment that fosters intolerance, hate, and resentment that exists in our nation’s schools, an environment that is reflective of the larger society. The ultimate goal should be to fight depersonalization and promote an environment of tolerance and inclusiveness, while at the same time providing pathways towards empowerment and increasing self-awareness. Adler (1998: 211) contends:

Clique dynamics of inclusion and exclusion teach young people the fundamental values of conflict and prejudice. As such, they may form the basis for the societal reproduction of racism, anti-Semitism, sexism, and other forms of bigotry and discrimination.

Adler and Adler (1995) developed a seemingly self-evident yet compelling theory known as “the contact hypothesis.” Simply put, this hypothesis states that lack of contact leads people to assume that out-group members are “different and undesirable” (Adler and Adler, 1995: 146). Both Hallinan (1979) and Aronson (2000) found support for this hypothesis through examination

of classroom structure and student friendship dynamics. Aronson (2000) promotes a method of classroom reform (or restructuring) known as “the jigsaw classroom.” This sort of learning environment promotes the cooperation and teamwork that build group cohesiveness. By rotating the cooperative learning groups every few weeks, students are placed into intimate contact with a variety of other personalities and individuals who they may not otherwise have interacted with. This encourages the development of empathy and tolerance, while minimizing sentiments conducive to depersonalization. Further expansions of this project will extend from the theoretical grounds outlined in this section.

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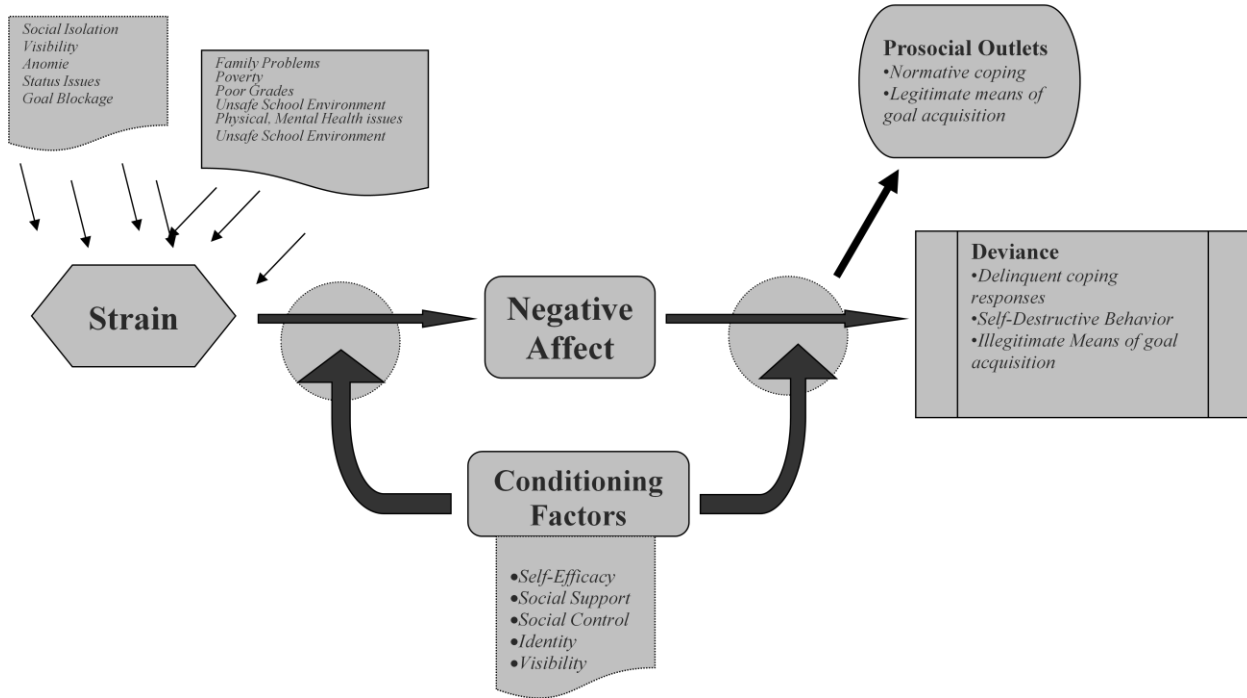
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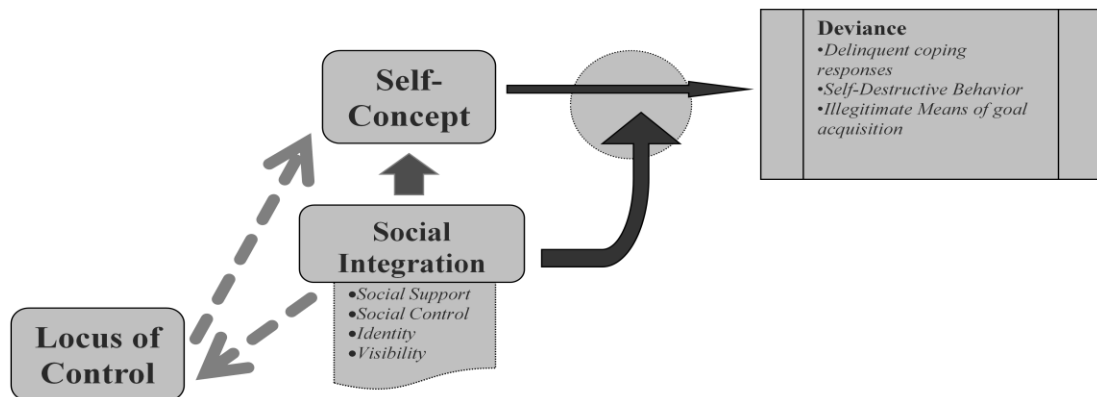
## APPENDIX A: THEORETICAL MODELS

### Strain Model of Delinquency/Self-Destructive Behavior



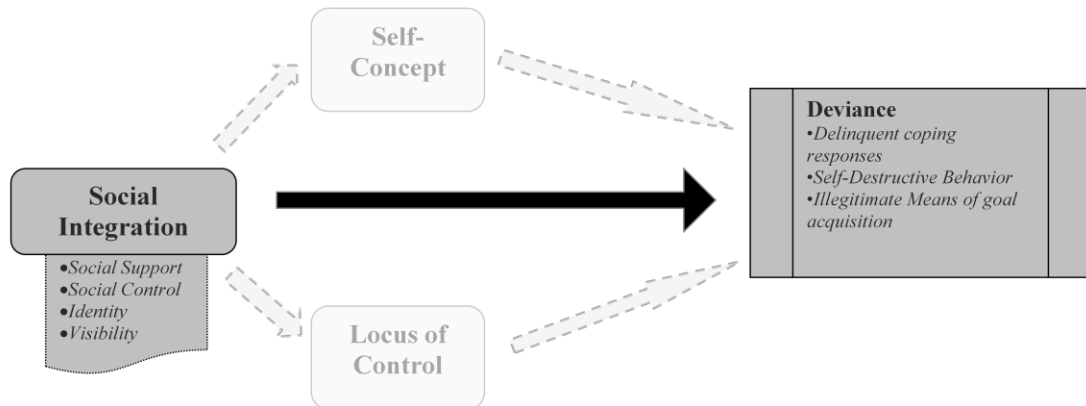
### Preliminary Dissertation Model

**Social Integration, Self-Concept, and Locus of Control:  
Pathways to Delinquency and Self-Destructive Behavior**



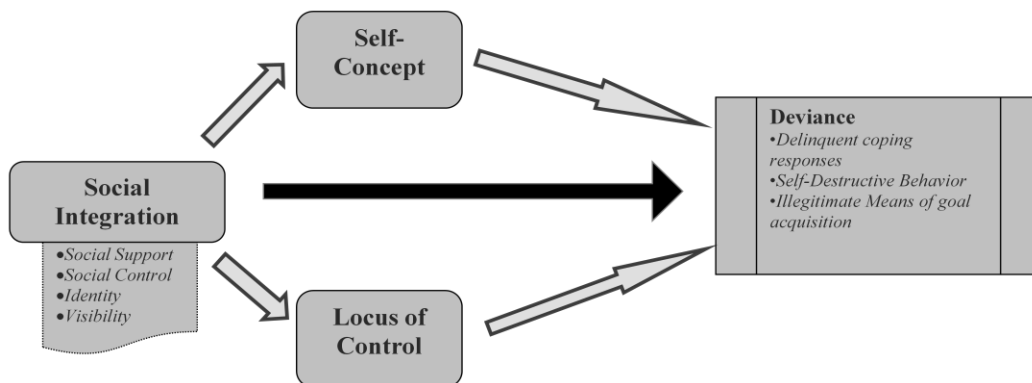
# Model 1

## Social Integration and Delinquency



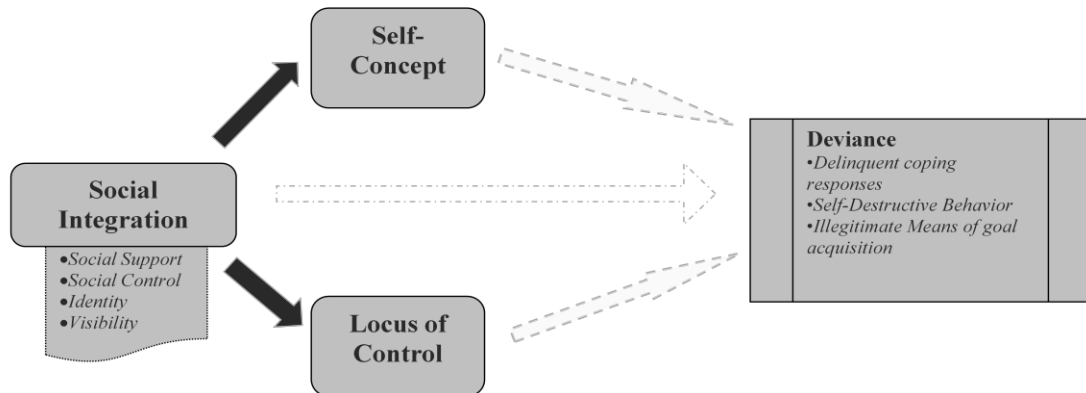
# Model 2

## Social Integration and Delinquency: Controls for Self-Concept and LOC



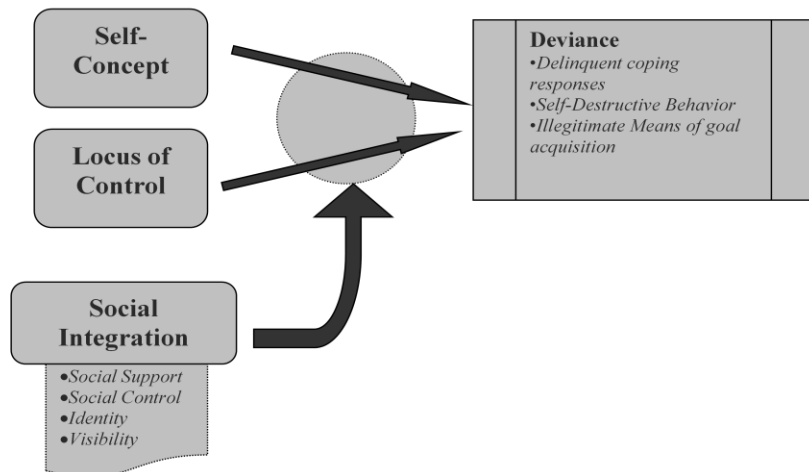
## Model 3

### The Effect of Social Integration on Self-Concept and LOC



## Model 4

### Social Integration as a Buffer Between Negative Self Concept, Low Sense of Control, and Self-Destructive Behavior



## APPENDIX B: BIVARIATE ANALYSES

**Table A.1: Bivariate Analysis of Independent and Dependent Variables**

	partic1a	ltdelin2	svdelin2	schalcob	schmarib	schcocb	schfighb	f2concb	f2locusb				
partic1a	1.0000												
ltdelin2	-0.0865	1.0000											
	0.0000												
svdelin2	-0.0194	0.2696	1.0000										
	0.0280	0.0000											
schalcob	-0.0082	0.2691	0.1433	1.0000									
	0.3722	0.0000	0.0000										
schmarib	-0.0769	0.2908	0.1570	0.3782	1.0000								
	0.0000	0.0000	0.0000	0.0000									
schcocb	-0.0437	0.1294	0.1312	0.1910	0.3260	1.0000							
	0.0000	0.0000	0.0000	0.0000	0.0000								
schfighb	-0.0417	0.2593	0.2356	0.1362	0.1366	0.1096	1.0000						
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
f2concb	0.0632	-0.0853	-0.0429	-0.0292	-0.0431	-0.0628	-0.0129	1.0000					
	0.0000	0.0000	0.0000	0.0008	0.0000	0.0000	0.1290						
f2locusb	0.0983	-0.1715	-0.1184	-0.0952	-0.1046	-0.0817	-0.1345	0.5730	1.0000				
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					

**Table A.2: Bivariate Analysis of Independent and Dependent Variables with Demographic Variables**

	partic1a	ltdelin2	svdelin2	schalcob	schmarib	schcoco	schfighb	f2concb	f2locusb	asian	hisp	black	natamer	white	flses
partic1a	1.0000														
ltdelin2	-0.0865	1.0000													
	0.0000														
svdelin2	-0.0194	0.2696	1.0000												
	0.0280	0.0000													
schalcob	-0.0082	0.2691	0.1433	1.0000											
	0.3722	0.0000	0.0000												
schmarib	-0.0769	0.2908	0.1570	0.3782	1.0000										
	0.0000	0.0000	0.0000	0.0000											
schcoco	-0.0437	0.1294	0.1312	0.1910	0.3260	1.0000									
	0.0000	0.0000	0.0000	0.0000	0.0000										
schfighb	-0.0417	0.2593	0.2356	0.1362	0.1366	0.1096	1.0000								
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000									
f2concb	0.0632	-0.0853	-0.0429	-0.0292	-0.0431	-0.0628	-0.0129	1.0000							
	0.0000	0.0000	0.0000	0.0008	0.0000	0.0000	0.1290								
f2locusb	0.0983	-0.1715	-0.1184	-0.0952	-0.1046	-0.0817	-0.1345	0.5730	1.0000						
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
asian	-0.0101	0.0018	-0.0173	-0.0282	-0.0131	0.0076	-0.0202	-0.0230	-0.0395	1.0000					
	0.2491	0.8230	0.0339	0.0009	0.1329	0.3866	0.0133	0.0067	0.0000						
hisp	-0.0491	0.0499	-0.0118	-0.0024	0.0082	0.0470	0.0266	0.0175	-0.0159	-0.0681	1.0000				
	0.0000	0.0000	0.1485	0.7817	0.3482	0.0000	0.0011	0.0393	0.0621	0.0000					
black	0.0002	-0.0177	0.0246	-0.0372	-0.0421	-0.0126	0.0656	0.0909	-0.0408	-0.0758	-0.1179	1.0000			
	0.9845	0.0308	0.0026	0.0000	0.0000	0.1487	0.0000	0.0000	0.0000	0.0000	0.0000				
natamer	0.0081	0.0136	0.0075	-0.0052	0.0169	0.0040	0.0175	-0.0101	-0.0001	-0.0195	-0.0304	-0.0338	1.0000		
	0.3579	0.0976	0.3607	0.5417	0.0539	0.6475	0.0317	0.2356	0.9901	0.0160	0.0002	0.0000			
white	0.0353	-0.0242	-0.0036	0.0424	0.0271	-0.0266	-0.0600	-0.0644	0.0582	-0.3508	-0.5460	-0.6071	-0.1565	1.0000	
	0.0001	0.0033	0.6596	0.0000	0.0019	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
flses	0.1242	-0.0234	-0.0293	0.0064	0.0209	-0.0282	-0.0821	0.0754	0.1216	0.0529	-0.2184	-0.1773	-0.0311	0.2570	1.0000
	0.0000	0.0049	0.0004	0.4551	0.0179	0.0014	0.0000								

**Table A.3: Bivariate Analysis of Independent and Dependent Variables with School-Characteristic Variables**

	partic1a	ltdelin2	svdelin2	schalcob	schmarib	schcocb	schfighb	f2concb	f2locusb	flscenrl	public	catholic	private2	urban	suburb	rural		
partic1a	1.0000																	
ltdelin2	-0.0865	1.0000																
	0.0000																	
svdelin2	-0.0194	0.2696	1.0000															
	0.0280	0.0000																
schalcob	-0.0082	0.2691	0.1433	1.0000														
	0.3722	0.0000	0.0000															
schmarib	-0.0769	0.2908	0.1570	0.3782	1.0000													
	0.0000	0.0000	0.0000	0.0000														
schcocb	-0.0437	0.1294	0.1312	0.1910	0.3260	1.0000												
	0.0000	0.0000	0.0000	0.0000	0.0000													
schfighb	-0.0417	0.2593	0.2356	0.1362	0.1366	0.1096	1.0000											
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000												
f2concb	0.0632	-0.0853	-0.0429	-0.0292	-0.0431	-0.0628	-0.0129	1.0000										
	0.0000	0.0000	0.0000	0.0008	0.0000	0.0000	0.1290											
f2locusb	0.0983	-0.1715	-0.1184	-0.0952	-0.1046	-0.0817	-0.1345	0.5730	1.0000									
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000										
flscenrl	-0.1004	0.1022	0.0282	-0.0275	0.0278	-0.0011	0.0091	0.0376	-0.0099	1.0000								
	0.0000	0.0000	0.0006	0.0013	0.0015	0.9004	0.2639	0.0000	0.2456									
public	-0.0303	0.0119	0.0231	-0.0153	0.0166	0.0109	0.0213	-0.0367	-0.0569	0.3022	1.0000							
	0.0006	0.1503	0.0048	0.0732	0.0580	0.2145	0.0093	0.0000	0.0000	0.0000								
catholic	0.0099	0.0013	-0.0159	0.0320	-0.0032	-0.0077	-0.0083	0.0233	0.0107	-0.1839	-0.7723	1.0000						
	0.2600	0.8751	0.0524	0.0002	0.7160	0.3823	0.3132	0.0062	0.2084	0.0000	0.0000							
private2	0.0303	-0.0119	-0.0231	0.0153	-0.0166	-0.0109	-0.0213	0.0367	0.0569	-0.3022	-1.0000	0.7723	1.0000					
	0.0006	0.1503	0.0048	0.0732	0.0580	0.2145	0.0093	0.0000	0.0000	0.0000	0.0000	0.0000						
urban	-0.0609	0.0332	-0.0020	-0.0237	-0.0155	-0.0203	0.0013	0.0459	0.0370	0.2008	-0.3487	0.3448	0.3487	1.0000				
	0.0000	0.0001	0.8111	0.0056	0.0772	0.0207	0.8703	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					
suburb	0.0029	0.0477	0.0158	0.0137	0.0537	0.0163	0.0063	-0.0026	-0.0129	0.1545	0.1397	-0.1499	-0.1397	-0.5273	1.0000			
	0.7421	0.0000	0.0544	0.1083	0.0000	0.0637	0.4407	0.7604	0.1293	0.0000	0.0000	0.0000	0.0000	0.0000				
rural	0.0561	-0.0835	-0.0150	0.0083	-0.0423	0.0023	-0.0081	-0.0417	-0.0221	-0.3618	0.1913	-0.1765	-0.1913	-0.4133	-0.5558	1.0000		
	0.0000	0.0000	0.0677	0.3322	0.0000	0.7949	0.3246	0.0000	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

**Table A.4: Bivariate Analysis of Independent and Dependent Variables with Community Variables**

	partic1a	ltdelin2	svdelin2	schalcob	schmarib	schcocb	schfighb	f2concb	f2locusb	reloc90	comminvo	churchat	curemplo	parinvo2	standtes	chasch92	reloc92	
partic1a	1.0000																	
ltdelin2	-0.0865 0.0000	1.0000																
svdelin2	-0.0194 0.0280	0.2696 0.0000	1.0000															
schalcob	-0.0082 0.3722	0.2691 0.0000	0.1433 0.0000	1.0000														
schmarib	-0.0769 0.0000	0.2908 0.0000	0.1570 0.0000	0.3782 0.0000	1.0000													
schcocb	-0.0437 0.0000	0.1294 0.0000	0.1312 0.0000	0.1910 0.0000	0.3260 0.0000	1.0000												
schfighb	-0.0417 0.0000	0.2593 0.0000	0.2356 0.0000	0.1362 0.0000	0.1366 0.0000	0.1096 0.0000	1.0000											
f2concb	0.0632 0.0000	-0.0853 0.0000	-0.0429 0.0000	-0.0292 0.0008	-0.0431 0.0000	-0.0628 0.0000	-0.0129 0.1290	1.0000										
f2locusb	0.0983 0.0000	-0.1715 0.0000	-0.1184 0.0000	-0.0952 0.0000	-0.1046 0.0000	-0.0817 0.0000	-0.1345 0.0000	0.5730 0.0000	1.0000									
reloc90	-0.0186 0.0350	0.0342 0.0000	0.0251 0.0024	-0.0223 0.0099	0.0016 0.8583	-0.0168 0.0583	0.0238 0.0040	-0.0018 0.8336	-0.0459 0.0000	1.0000								
comminvo	0.2213 0.0000	0.0193 0.0218	0.0284 0.0007	0.0315 0.0003	-0.0238 0.0078	-0.0048 0.5897	0.0517 0.0000	0.1164 0.0000	0.0882 0.0000	-0.0189 0.0240	1.0000							
churchat	0.1238 0.0000	-0.1277 0.0000	-0.0642 0.0000	-0.0663 0.0000	-0.0918 0.0000	-0.0395 0.0000	-0.0441 0.0000	0.0646 0.0000	0.1102 0.0000	-0.0497 0.0000	0.3257 0.0000	1.0000						
curemplo	-0.0112 0.2162	0.0746 0.0000	0.0324 0.0001	0.0436 0.0000	0.0534 0.0000	0.0222 0.0133	0.0069 0.4113	-0.0014 0.8714	0.0128 0.1422	-0.0258 0.0024	-0.0004 0.9626	-0.0139 0.0967	1.0000					
parinvo2	0.1801 0.0000	-0.0916 0.0000	-0.0155 0.0786	-0.0088 0.3358	-0.0565 0.0000	-0.0163 0.0824	-0.0009 0.9145	0.0982 0.0000	0.1136 0.0000	-0.0601 0.0000	0.2742 0.0000	0.2128 0.0000	-0.0242 0.0060	1.0000				
standtes	0.1360 0.0000	-0.1369 0.0000	-0.1173 0.0000	-0.0628 0.0000	-0.0677 0.0000	-0.0715 0.0000	-0.1964 0.0000	0.1285 0.0000	0.2492 0.0000	-0.0218 0.0088	0.0317 0.0002	0.0778 0.0000	0.0284 0.0009	0.1199 0.0000	1.0000			
chasch92	-0.0438 0.0000	0.0683 0.0000	0.0502 0.0000	-0.0187 0.0283	0.0251 0.0041	-0.0006 0.9482	0.0344 0.0000	-0.0113 0.1852	-0.0372 0.0000	0.1190 0.0000	-0.0372 0.0000	-0.0056 0.5015	-0.0001 0.9950	-0.0428 0.0000	-0.0680 0.0000	1.0000		
reloc92	-0.0483 0.0000	0.0391 0.0000	0.0367 0.0000	0.0099 0.2479	0.0219 0.0123	0.0202 0.0209	0.0214 0.0090	-0.0025 0.7698	-0.0203 0.0176	0.2631 0.0000	-0.0094 0.2616	-0.0669 0.0000	-0.0072 0.3926	-0.0630 0.0000	-0.0529 0.0000	0.2108 0.0000	1.0000	



## APPENDIX C: ADDITIONAL TABLES WITH NON-SIGNIFICANT FINDINGS

**Table 5.25: OLS Regression Results for the Effects of Extracurricular Activity Participation on Light Delinquency for Students with Externalized Locus of Control (sophomore year)**

		Model 4	
Light Delinquency Score		β	s.e.
Independent Variables			
Any Extracurricular Activity? 1990		-0.341	0.255
Control Variables			
Asian		-0.627	0.479
Hispanic		0.074	0.322
African American		-0.984 **	0.343
Native American		-0.907	0.873
SES		-0.196	0.149
Female		-0.487 *	0.198
School Enrollment		0.120 *	0.052
Private		0.227	0.413
Urban		0.447	0.294
Rural		-0.348	0.254
Standardized Test Score 1990		-0.032 *	0.013
Relocated? 1990		0.718 *	0.326
Changed Schools? 1992		0.389	0.404
Currently Employed? 1990		0.567 *	0.227
Church Attendance 1990		-0.221 ***	0.059
Parental Involvement 1990		-0.072	0.116
Community Involvement 1990		0.082 **	0.030
Constant		7.088	0.720
R <sup>2</sup>		0.064	

\* p<.05

\*\* p < .01

\*\*\*p<.001

N= 2388

Note: the weight f2f1pnwt was applied to account for effects of longitudinal design

Source: National Educational Longitudinal Study of 1988

**Table 5.26: Logit Regression Results for the Effects of Extracurricular Activity Participation on Severe Delinquency for Students with Low Self-Concept (sophomore year)**

		<b>Model 4</b>	
<b>Severe Delinquency</b>		<b><math>\beta</math></b>	<b>s.e.</b>
<b>Independent Variables</b>			
Any Extracurricular Activity? 1990		-0.121	0.339
<b>Control Variables</b>			
Asian		-2.773 **	1.097
Hispanic		-0.265	0.568
African American		0.299	0.441
Native American		-0.050	1.067
SES		0.367	0.234
Female		-1.127 ***	0.317
School Enrollment		-0.075	0.078
Private		0.338	0.529
Urban		-0.530	0.422
Rural		0.036	0.344
Standardized Test Score 1990		-0.092 ***	0.017
Relocated? 1990		0.422	0.389
Changed Schools? 1992		0.690	0.410
Currently Employed? 1990		0.558	0.290
Church Attendance 1990		-0.118	0.088
Parental Involvement 1990		0.038	0.136
Community Involvement 1990		0.032	0.035
Constant		2.063	0.905
* p<.05		N=1934	
** p < .01			
***p<.001			
Note: the weight f2f1pnwt was applied to account for effects of longitudinal design			
Source: National Educational Longitudinal Study of 1988			

**Table 5.27: Logit Regression Results for the Effects of Extracurricular Activity Participation on Severe Delinquency for Students with Externalized Locus of Control (sophomore year)**

		<b>Model 4</b>	
<b>Severe Delinquency</b>		<b>β</b>	<b>s.e.</b>
<b>Independent Variables</b>		-0.145	0.319
Any Extracurricular Activity? 1990			
<b>Control Variables</b>			
Asian		-1.584	0.830
Hispanic		-1.056 *	0.468
African American		-1.712 **	0.571
Native American			
SES		-0.155	0.227
Female		-1.545 ***	0.311
School Enrollment		0.063	0.077
Private		-0.415	0.596
Urban		0.334	0.375
Rural		-0.313	0.330
Standardized Test Score 1990		-0.060 ***	0.014
Relocated? 1990		0.440	0.377
Changed Schools? 1992		0.292	0.402
Currently Employed? 1990		0.624 *	0.278
Church Attendance 1990		-0.023	0.067
Parental Involvement 1990		0.046	0.141
Community Involvement 1990		0.046	0.034
Constant		-0.131	0.981
* p<.05		N=2411	
** p < .01			
***p<.001			
Note: the weight f2f1pnwt was applied to account for effects of longitudinal design			
Source: National Educational Longitudinal Study of 1988			

**Table 5.28: Logit Regression Results for the Effects of Extracurricular Activity Participation on Fighting at School for Students with Low Self-Concept (sophomore year)**

		Model 4		
Fighting at School		$\beta$		s.e.
<b>Independent Variables</b>				
	Any Extracurricular Activity? 1990	-0.118		0.221
<b>Control Variables</b>				
	Asian	-0.581		0.499
	Hispanic	0.259		0.411
	African American	0.635		0.353
	Native American	0.037		0.812
	SES	0.073		0.139
	Female	-1.370 ***		0.204
	School Enrollment	-0.114 *		0.056
	Private	0.388		0.436
	Urban	-0.531		0.313
	Rural	-0.126		0.252
	Standardized Test Score 1990	-0.064 ***		0.011
	Relocated? 1990	0.169		0.270
	Changed Schools? 1992	0.432		0.326
	Currently Employed? 1990	-0.034		0.214
	Church Attendance 1990	-0.024		0.057
	Parental Involvement 1990	-0.023		0.096
	Community Involvement 1990	0.015		0.025
	Constant	2.149		0.611
* p<.05		N=1935		
** p < .01				
***p<.001				
Note: the weight f2f1pnwt was applied to account for effects of longitudinal design				
Source: National Educational Longitudinal Study of 1988				

**Table 5.29: Logit Regression Results for the Effects of Extracurricular Activity Participation on Fighting at School for Students With Externalized Locus of Control (sophomore year)**

		<b>Model 4</b>		
<b>Fighting at School</b>		<b><math>\beta</math></b>	<b>s.e.</b>	
<b>Independent Variables</b>				
	Any Extracurricular Activity? 1990	-0.120		0.181
<b>Control Variables</b>				
	Asian	-0.644		0.443
	Hispanic	-0.170		0.269
	African American	-0.578		0.311
	Native American	-0.280		0.615
	SES	-0.147		0.125
	Female	-1.358 ***		0.163
	School Enrollment	-0.044		0.042
	Private	0.211		0.375
	Urban	-0.027		0.253
	Rural	-0.293		0.194
	Standardized Test Score 1990	-0.055 ***		0.010
	Relocated? 1990	0.122		0.260
	Changed Schools? 1992	-0.348		0.364
	Currently Employed? 1990	0.072		0.180
	Church Attendance 1990	-0.033		0.050
	Parental Involvement 1990	0.091		0.105
	Community Involvement 1990	0.043		0.026
	Constant	1.403		0.584
* p<.05		N=2430		
** p < .01				
***p<.001				
Note: the weight f2f1pnwt was applied to account for effects of longitudinal design				
Source: National Educational Longitudinal Study of 1988				

**Table 5.30: Logit Regression Results for the Effects of Extracurricular Activity Participation on "Under the Influence at School" for Students with Low Self-Concept (sophomore year)**

		Alcohol			Marijuana			Cocaine		
Model 4		β		s.e.	β		s.e.	β		s.e.
Independent Variables										
	Any Extracurricular Activity? 1990	-0.328		0.250	-0.315		0.250	-0.674		0.648
Control Variables										
	Asian	-1.384 **		0.505	-1.404 **		0.539	0.362		0.994
	Hispanic	-0.226		0.420	0.879 *		0.416	1.814 **		0.650
	African American	-0.444		0.416	-0.185		0.449	1.050		0.819
	Native American				0.172		1.328			
	SES	-0.029		0.138	0.357 *		0.162	0.011		0.322
	Female	-0.355 *		0.178	-0.440 *		0.194	-0.889		0.489
	School Enrollment	-0.043		0.050	0.074		0.056	-0.111		0.106
	Private	0.806 *		0.328	0.898 *		0.394	-0.545		1.353
	Urban	-0.238		0.262	-1.605 ***		0.320	-3.512 ***		1.094
	Rural	-0.021		0.226	-0.394		0.265	-0.306		0.576
	Standardized Test Score 1990	-0.028 *		0.011	-0.030 **		0.011	-0.029		0.036
	Relocated? 1990	0.128		0.249	0.056		0.321	-0.871		1.061
	Changed Schools? 1992	-0.088		0.363	0.400		0.369	0.133		0.861
	Currently Employed? 1990	0.167		0.198	0.270		0.228	1.247 **		0.473
	Church Attendance 1990	-0.158 **		0.054	-0.261 ***		0.060	-0.218		0.138
	Parental Involvement 1990	0.086		0.081	-0.154		0.108	0.119		0.217
	Community Involvement 1990	0.050 *		0.024	0.076 **		0.027	0.117		0.083
	Constant	2.063		0.905	-0.275		0.661	-2.168		1.706
* p<.05		N=1809			N=1730			N=1716		
** p < .01		Note: the weight f2f1pnwt was applied to account for effects of longitudinal design								
***p<.001		Source: National Educational Longitudinal Study of 1988								

**Table 5.31: Logit Regression Results for the Effects of Extracurricular Activity Participation on "Under the Influence at School" for Students with Externalized Locus of Control (sophomore year)**

		Alcohol			Marijuana			Cocaine		
Model 4		β	s.e.		β	s.e.		β	s.e.	
Independent Variables										
	Any Extracurricular Activity? 1990	0.034		0.241	-0.086		0.226	-0.902		0.535
Control Variables										
	Asian	-1.068 *		0.427	-0.947 *		0.433	-0.004		0.831
	Hispanic	-0.069		0.284	-0.257		0.316	0.531		0.678
	African American	-0.326		0.361	-0.553		0.531	0.823		0.623
	Native American	-0.646		0.709	0.300		0.800			
	SES	0.039		0.116	0.242		0.124	-0.812 **		0.262
	Female	-0.612 ***		0.158	-0.524 **		0.184	-0.693		0.458
	School Enrollment	-0.040		0.045	0.097		0.052	-0.157		0.087
	Private	0.548		0.325	0.610		0.369	-1.016		1.097
	Urban	-0.245		0.242	-0.784 **		0.295	-1.662		0.927
	Rural	-0.009		0.183	-0.425 *		0.215	-0.523		0.498
	Standardized Test Score 1990	-0.019 *		0.009	-0.036 ***		0.011	-0.001		0.026
	Relocated? 1990	0.050		0.241	-0.117		0.299	-0.595		0.711
	Changed Schools? 1992	0.075		0.315	0.394		0.330	-0.465		1.047
	Currently Employed? 1990	0.355 *		0.170	0.278		0.201	1.024 **		0.395
	Church Attendance 1990	-0.103 *		0.045	-0.158 **		0.055	0.015		0.120
	Parental Involvement 1990	0.006		0.081	-0.095		0.096	-0.006		0.219
	Community Involvement 1990	0.027		0.022	0.027		0.025	0.164 **		0.055
	Constant	-0.266		0.513	-0.127		0.646	-3.987		1.141
* p<.05		N=2257			N=2151			N=2130		
** p < .01		Note: the weight f2f1pnwt was applied to account for effects of longitudinal design								
***p<.001		Source: National Educational Longitudinal Study of 1988								

## **VITA**

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